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<211> 105

<212> PRT

<213> Homo sapiens

<400> 4826

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<212> PRT

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          1075          1080          1085
Val Ser Val Ala Asp Gln Lys Gly Lys Ser Thr Val Ala Ser Ser Glu
          1090          1095          1100
Ala Lys Pro Ala Ala Thr Ile Arg Ile Val Gln Gly Leu Gly Val Met
          1105          1110          1115          1120
Pro Pro Lys Ala Gly Gln Thr Ile Thr Val Ala Thr His Ala Lys Gln
          1125          1130          1135
Gly Ala Ser Val Ala Ser Gly Ser Gly Thr Val His Thr Ser Ala Val
          1140          1145          1150
Ser Leu Pro Ser Met Asn Ala Ala Val Ser Lys Thr Val Ala Val Ala
          1155          1160          1165
Ser Gly Ala Ala Ser Thr Pro Ile Ser Ile Ser Thr Gly Ala Pro Thr
          1170          1175          1180
Val Arg Gln Val Pro Val Ser Thr Thr Val Val Ser Thr Ser Gln Ala
          1185          1190          1195          1200
Gly Lys Leu Pro Thr Arg Ile Thr Val Pro Leu Ser Val Ile Ser Gln
          1205          1210          1215
Pro Met Lys Gly Lys Ser Val Val Thr Ala Pro Ile Ile Lys Gly Asn
          1220          1225          1230
Leu Gly Ala Asn Leu Ser Gly Leu Gly Arg Asn Ile Ile Leu Thr Thr
          1235          1240          1245
Met Pro Ala Gly Thr Lys Leu Ile Ala Gly Asn Lys Pro Val Ser Phe
          1250          1255          1260
Leu Thr Ala Gln Gln Leu Gln Gln Leu Gln Gln Gly Gln Ala Thr
          1265          1270          1275          1280
Gln Val Arg Ile Gln Thr Val Pro Ala Ser Xaa Leu Gln Gln Gly Thr
          1285          1290          1295
Ala Ser Gly Ser Ser Lys Ala Val Ser Thr Val Val Val Thr Thr Ala
          1300          1305          1310
Pro Ser Pro Lys Gln Ala Pro Glu Gln Gln
          1315          1320

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<210> 4829

<211> 1605

<212> DNA

<213> Homo sapiens

<400> 4829

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60
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120
ggggatatgg ttctttttaga acctctcaat gaggagacct tcatcaacaa cctcaagaag
180
cgctttgacc acagtgaaat atacacttac attggaagtg tggttatatc tgtaaccca
240
tatcgggtctt taccatttta ttcaccagag aaagtggag aatacaggaa cagaaatttt
300
tatgaaactga gccctcacat ctttgccctt tcggatgaag catacagatc cctacgagat
360
caagataagg accaatgtat tctcattact ggggaaagtg gagcaggaaa aacagaggcc
420
agtaagcttg tcatgtccta tgtggcagct gtttgtggaa aaggagcaga agttaatcaa
480
gttaaagaac agcttttaca gtccaacccg gtcctggaag cttttggaaa tgccaaaact
540
gtaaggaatg acaactcctc tagatttggc aaatatatgg atattgaatt tgactttaaa
600
ggcgatccac taggaggagt aataagtaac tatcttttag agaaatctcg ggttgtaaa
660
cagccaagag gtgaaagaaa cttccatgtg ttctatcagc tgctctctgg tgctctgaa
720
gagctcctca ataaacttaa gcttgagagg gatttcagca ggtataacta cctgagtctg
780
gattcgcca aagtgaatgg agtggatgat gcagcaaatt ttagaaccgt gcggaatgcc
840
atgcagattg tgggctttat ggatcatgaa gctgagtctg tcttggcggg ggtggcagca
900
gtgttgaaac tggggaacat tgagttcaag cccgaatctc gagtgaatgg tctagatgaa
960
agcaaatca aagataaaaa tgagttaaaa gaaatttgtg aattgaccgg cattgatcaa
1020
tcagttctag aacgagcatt cagtttccga acagttgagg ccaaacagga gaaagtttca
1080
actacactga atgtggctca ggcttattat gcccgatgat ctctggctaa aaacctctac
1140
agcaggttgt tttcatgggt ggtaaatcga atcaatgaaa gcattaaggc acaaacaaaa
1200
gtgagaaaga aggtcatggg tgttctggac atttatggct ttgagatttt cgaggacaac
1260
agctttgagc agttcattat taattattgt aacgaaaagc tgcaacaaat cttcattgaa
1320
cttactctta aagaagagca ggaggagtat atacgggagg atatagaatg gactcacatt
1380
gactacttca ataagtctat ctttgtgac ctaatagaaa ataacacaaa tggaatcctg
1440
gccatgttgg atgaagagt cctcagacct ggcacagtca ctgatgagac cttcttagaa
1500
aagctgaacc aagtatgtgc caccaccag cattttgaaa gcaggatgag caagtgtctt
1560
cggttcctca atgacacgtc tctgcctcac agctgcttca ggatc
1605

<210> 4830
 <211> 512
 <212> PRT
 <213> Homo sapiens

<400> 4830

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Met Ala Lys Met Glu Val Lys Thr Ser Leu Leu Asp Asn Met Ile Gly
 1          5          10          15
Val Gly Asp Met Val Leu Leu Glu Pro Leu Asn Glu Glu Thr Phe Ile
      20          25          30
Asn Asn Leu Lys Lys Arg Phe Asp His Ser Glu Ile Tyr Thr Tyr Ile
      35          40          45
Gly Ser Val Val Ile Ser Val Asn Pro Tyr Arg Ser Leu Pro Ile Tyr
      50          55          60
Ser Pro Glu Lys Val Glu Glu Tyr Arg Asn Arg Asn Phe Tyr Glu Leu
      65          70          75          80
Ser Pro His Ile Phe Ala Leu Ser Asp Glu Ala Tyr Arg Ser Leu Arg
      85          90          95
Asp Gln Asp Lys Asp Gln Cys Ile Leu Ile Thr Gly Glu Ser Gly Ala
      100          105          110
Gly Lys Thr Glu Ala Ser Lys Leu Val Met Ser Tyr Val Ala Ala Val
      115          120          125
Cys Gly Lys Gly Ala Glu Val Asn Gln Val Lys Glu Gln Leu Leu Gln
      130          135          140
Ser Asn Pro Val Leu Glu Ala Phe Gly Asn Ala Lys Thr Val Arg Asn
      145          150          155          160
Asp Asn Ser Ser Arg Phe Gly Lys Tyr Met Asp Ile Glu Phe Asp Phe
      165          170          175
Lys Gly Asp Pro Leu Gly Gly Val Ile Ser Asn Tyr Leu Leu Glu Lys
      180          185          190
Ser Arg Val Val Lys Gln Pro Arg Gly Glu Arg Asn Phe His Val Phe
      195          200          205
Tyr Gln Leu Leu Ser Gly Ala Ser Glu Glu Leu Leu Asn Lys Leu Lys
      210          215          220
Leu Glu Arg Asp Phe Ser Arg Tyr Asn Tyr Leu Ser Leu Asp Ser Ala
      225          230          235          240
Lys Val Asn Gly Val Asp Asp Ala Ala Asn Phe Arg Thr Val Arg Asn
      245          250          255
Ala Met Gln Ile Val Gly Phe Met Asp His Glu Ala Glu Ser Val Leu
      260          265          270
Ala Val Val Ala Ala Val Leu Lys Leu Gly Asn Ile Glu Phe Lys Pro
      275          280          285
Glu Ser Arg Val Asn Gly Leu Asp Glu Ser Lys Ile Lys Asp Lys Asn
      290          295          300
Glu Leu Lys Glu Ile Cys Glu Leu Thr Gly Ile Asp Gln Ser Val Leu
      305          310          315          320
Glu Arg Ala Phe Ser Phe Arg Thr Val Glu Ala Lys Gln Glu Lys Val
      325          330          335
Ser Thr Thr Leu Asn Val Ala Gln Ala Tyr Tyr Ala Arg Asp Ala Leu
      340          345          350
Ala Lys Asn Leu Tyr Ser Arg Leu Phe Ser Trp Leu Val Asn Arg Ile
      355          360          365
Asn Glu Ser Ile Lys Ala Gln Thr Lys Val Arg Lys Lys Val Met Gly
  
```

```

      370      375      380
Val Leu Asp Ile Tyr Gly Phe Glu Ile Phe Glu Asp Asn Ser Phe Glu
385      390      395      400
Gln Phe Ile Ile Asn Tyr Cys Asn Glu Lys Leu Gln Gln Ile Phe Ile
      405      410      415
Glu Leu Thr Leu Lys Glu Glu Gln Glu Tyr Ile Arg Glu Asp Ile
      420      425      430
Glu Trp Thr His Ile Asp Tyr Phe Asn Asn Ala Ile Ile Cys Asp Leu
      435      440      445
Ile Glu Asn Asn Thr Asn Gly Ile Leu Ala Met Leu Asp Glu Glu Cys
      450      455      460
Leu Arg Pro Gly Thr Val Thr Asp Glu Thr Phe Leu Glu Lys Leu Asn
465      470      475      480
Gln Val Cys Ala Thr His Gln His Phe Glu Ser Arg Met Ser Lys Cys
      485      490      495
Ser Arg Phe Leu Asn Asp Thr Ser Leu Pro His Ser Cys Phe Arg Ile
      500      505      510

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<210> 4831

<211> 578

<212> DNA

<213> Homo sapiens

<400> 4831

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cggacggtgg ccctcaaagg cccagtcacc aatgccgccca tcctgctggc gcccgtcagc
60
atgctgagct cagacttcag gccagcctg ccgctgcccc acttcaacaa gcacctgctg
120
ggcgccgagc acggggacga gccgcgccac gggggcctca ctctgcgcct gggcctccac
180
cagcagagcg tgctcggcgg ccaggaccag ctgcgcgtcc gtgtgacgga gctggaggac
240
gaggtgcgca acctgcgcaa gatcaatcgg gacctgttcg acttctccac gcgcttcac
300
acgcgccggg ccaagtggag cccggagacc ccggcccgag gcgcccaggc ctgagcccca
360
tgcctcccag caaccagggc ccgcggtgtt ggccccacc agcccaggcc tggactctcc
420
tcagttctgt gtcgtgttcg ggtttttctt ctgtgactgg gccgtcttgg tgtctcgtgg
480
cacgcgtcac agtgggtgcta gtctgttttt aacaaaagag gatgaaaagc caaaaaaaaa
540
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa
578

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<210> 4832

<211> 105

<212> PRT

<213> Homo sapiens

<400> 4832

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Arg Thr Val Ala Leu Lys Gly Pro Val Thr Asn Ala Ala Ile Leu Leu
1      5      10      15
Ala Pro Val Ser Met Leu Ser Ser Asp Phe Arg Pro Ser Leu Pro Leu

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					20					25					30				
Pro	His	Phe	Asn	Lys	His	Leu	Leu	Gly	Ala	Glu	His	Gly	Asp	Glu	Pro				
					35					40					45				
Arg	His	Gly	Gly	Leu	Thr	Leu	Arg	Leu	Gly	Leu	His	Gln	Gln	Ser	Val				
					50					55					60				
Leu	Gly	Gly	Gln	Asp	Gln	Leu	Arg	Val	Arg	Val	Thr	Glu	Leu	Glu	Asp				
					65					70					75				
Glu	Val	Arg	Asn	Leu	Arg	Lys	Ile	Asn	Arg	Asp	Leu	Phe	Asp	Phe	Ser				
					85					90					95				
Thr	Arg	Phe	Ile	Thr	Arg	Pro	Ala	Lys											
					100					105									

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<210> 4833
<211> 872
<212> DNA
<213> Homo sapiens
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<400> 4833
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120
ctcaacaact gagatgaacg tcgactcgct tgcaggcaag ttgtcactca gcagcgatct
180
gaactatatc ctgggttcca gaaaaggcag aggttcttac cgaaagcagg ggaggaagcc
240
gcagcccaag gaggtcgtca cttgccggga aggtgggtcg ggccaggctg cactcaaaac
300
ccgtgctctg tccacactgc tacggggcca gagccaagga agcttcact tcttcccca
360
gacagcccca acagcggcta cccaaggag ccagcagcct tgtgtcctgg gatccccagc
420
ccctgcagaa tgaccacca ggatctgagc atcacagcca aactcatcaa tggaggtgta
480
gcaggggtcg tgggggtgac ctgctgttcc cccatcgact tggccaagac tcgcctgcag
540
aaccagcatg ggaaagccat gtacaaagga atgatcgact gcctgatgaa gacgggtcgg
600
gcgaggggct tcttcggcat gtaccgaggg gctgcagtga acctcactct ggtcactcca
660
gagaaggcca tcaagctggc ggccaacgac tttttccggc ggctgctcat ggaagatggg
720
atgcagcgga acctgaagat ggagatgctt gccgggtgtg gggctgggat gtgccaggtc
780
gtggtgacct gtcccatgga aatgctcaag attcagctgc aggcatgctg gacgcctggc
840
cgtccatcat cagggtcgg cctcagcacc ct
872

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```
<210> 4834
<211> 147
<212> PRT
<213> Homo sapiens
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<400> 4834

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Met Thr His Gln Asp Leu Ser Ile Thr Ala Lys Leu Ile Asn Gly Gly
 1           5           10           15
Val Ala Gly Leu Val Gly Val Thr Cys Val Phe Pro Ile Asp Leu Ala
      20           25           30
Lys Thr Arg Leu Gln Asn Gln His Gly Lys Ala Met Tyr Lys Gly Met
      35           40           45
Ile Asp Cys Leu Met Lys Thr Ala Arg Ala Glu Gly Phe Phe Gly Met
      50           55           60
Tyr Arg Gly Ala Ala Val Asn Leu Thr Leu Val Thr Pro Glu Lys Ala
      65           70           75           80
Ile Lys Leu Ala Ala Asn Asp Phe Phe Arg Arg Leu Leu Met Glu Asp
      85           90           95
Gly Met Gln Arg Asn Leu Lys Met Glu Met Leu Ala Gly Cys Gly Ala
      100          105          110
Gly Met Cys Gln Val Val Val Thr Cys Pro Met Glu Met Leu Lys Ile
      115          120          125
Gln Leu Gln Ala Cys Trp Thr Pro Gly Arg Pro Ser Ser Gly Leu Gly
      130          135          140
Leu Ser Thr
145

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<210> 4835

<211> 1846

<212> DNA

<213> Homo sapiens

<400> 4835

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nctcatttcc gaagtgccct gacagcccac cctgtgcgtg accctgtgca catgtaccag
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120
cagtgggaga tccagaatac cagccatctg gccgttgatg gggaccgggc agctgcttgg
180
cccgtgggta ttccagcacc atcccgcccg gcctcccgct ttgaggtgct gcgctgggac
240
tacttcacgg agcagcacgc tttctcctgc gccgatggct caccocgctg cccactgcgt
300
ggggctgacc gggctgatgt ggccgatgtt ctggggacag ctctagagga gctgaaccgc
360
cgctaccacc cggccttgcg gctccagaag cagcagctgg tgaatggcta ccgacgcttt
420
gatccggccc ggggatgga atacacgctg gacttgcagc tggaggcact gacccccag
480
ggaggccgcc ggcccctcac tcgccgagtg cagctgctcc ggccgctgag ccgctggag
540
atcttgccctg tgccctatgt cactgaggcc tcacgtctca ctgtgctgct gcctctagct
600
gcggctgagc gtgacctggc ccctggcttc ttggaggcct ttgccactgc agcactggag
660
cctggtgatg ctgcggcagc cctgaccctg ctgctactgt atgagccgcg ccaggcccag
720
cgcgtaggcc atgcagatgt cttcgcacct gtcaaggccc acgtggcaga gctggagcgg
780

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cgtttccccg gtgcccgggt gccatggctc agtgtgcaga cagccgcacc ctcaccactg
 840
 cgcctcatgg atctactctc caagaagcac ccgctggaca cactgttctt gctggccggg
 900
 ccagacacgg tgctcacgcc tgacttcctg aaccgctgcc gcatgcatgc catctccggc
 960
 tggcaggcct tctttcccat gcatttccaa gccttcacc cagctgtggc cccaccacaa
 1020
 gggcctgggc cccagagct ggggcccgtga cactggccgc tttgatcgcc aggcagccag
 1080
 cgaggcctgc ttctacaact ccgactacgt ggcagcccgt gggcgccctgg gcgcagctca
 1140
 gaacaagaag aggagctgct ggagagcctg gatgtgtacg agctgttctt ccacttctcc
 1200
 agtctgcatg tgctgcgggc ggtggagcgg cgctgctgca gccgctaccg ggcccagacg
 1260
 tgcagcgcga ggctcagtga ggacctgtac caccgctgcc tccagagcgt gcttgagggc
 1320
 ctgggtcccc gaaccagct ggccatgcta ctctttgaac aggagcaggg caacagcacc
 1380
 tgaccccacc ctgtccccgt gggcccgtgg cattggccac accccacccc acttctcccc
 1440
 caaaaccaga gccacctgcc agcctcgctg ggcagggctg gccgtagcca gaccccaagc
 1500
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 1560
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 1620
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 1680
 gcctctgggc cctgggggct gggctgtaga agagtgttg gggaaggagg gagctgagga
 1740
 gggggcatct cccaacttct cccttttga cctgcccga gctccctgcc ttaataaac
 1800
 tggccaagtg tggaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa
 1846

<210> 4836

<211> 349

<212> PRT

<213> Homo sapiens

<400> 4836

Xaa	His	Phe	Arg	Ser	Ala	Leu	Thr	Ala	His	Pro	Val	Arg	Asp	Pro	Val
1				5				10						15	
His	Met	Tyr	Gln	Leu	His	Lys	Ala	Phe	Ala	Arg	Ala	Glu	Leu	Glu	Arg
			20				25					30			
Thr	Tyr	Gln	Glu	Ile	Gln	Glu	Leu	Gln	Trp	Glu	Ile	Gln	Asn	Thr	Ser
		35				40					45				
His	Leu	Ala	Val	Asp	Gly	Asp	Arg	Ala	Ala	Ala	Trp	Pro	Val	Gly	Ile
	50				55					60					
Pro	Ala	Pro	Ser	Arg	Pro	Ala	Ser	Arg	Phe	Glu	Val	Leu	Arg	Trp	Asp
65				70				75					80		
Tyr	Phe	Thr	Glu	Gln	His	Ala	Phe	Ser	Cys	Ala	Asp	Gly	Ser	Pro	Arg

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<210> 4837
<211> 906
<212> DNA
<213> Homo sapiens
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<400> 4837
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120
actgtaaatt atgatagtgt caattctgac aactctaagc caaagatatt taaaagtcaa
180
atagagaaca taaatttgac caatggcagc aatggggagga acacagagtc cccagctgcc
240
attcaccctt gtggaaatcc tacagtgatt gaggacgctt tggacaagat taaaagcaat
300
gaccctgaca ccacagaagt caatttgaac aacattgaga acatcacaac acagaccctt
360
accgcctttg ctgaagccct caaggacaac actgtggtga agacgttcag tctggccaac
420
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acgcatgccg acgacagtgc agccatggcc attgcagaga tgctcaaagt caatgagcac
 480
 atcaccaacg taaacgtcga gtccaacttc ataacgggaa aggggatcct ggccatcatg
 540
 agagctctcc agcacaacac ggtgctcacg gagctgcgtt tccataacca gaggcacatc
 600
 atgggcagcc aggtggaaat ggagattgtc aagctgctga aggagaacac gacgctgctg
 660
 aggctgggat accattttga actcccagga ccaagaatga gcatgacgag cattttgaca
 720
 agaaatatgg ataaacagag gcaaaaacgt ttgcaggagc aaaaacagca ggaggggatac
 780
 gatggaggac ccaatcttag gaccaaagtc tggcaaagag gaacacctag cccttccctc
 840
 tatgtatctc ccaggcactc accgtgggtca tccccaaaac tcccctacgg agagacgaca
 900
 acgcgt
 906

<210> 4838

<211> 302

<212> PRT

<213> Homo sapiens

<400> 4838

Xaa	Gly	Glu	Glu	Glu	Glu	Val	Val	Ala	Ala	Phe	Gly	Lys	Lys	Glu	Ser
1				5					10					15	
Gln	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Ser	Asp	Glu	Gly	Glu	Arg	Thr	Ile
			20					25					30		
Glu	Thr	Ala	Lys	Gly	Ile	Asn	Gly	Thr	Val	Asn	Tyr	Asp	Ser	Val	Asn
		35					40					45			
Ser	Asp	Asn	Ser	Lys	Pro	Lys	Ile	Phe	Lys	Ser	Gln	Ile	Glu	Asn	Ile
		50				55					60				
Asn	Leu	Thr	Asn	Gly	Ser	Asn	Gly	Arg	Asn	Thr	Glu	Ser	Pro	Ala	Ala
65					70				75					80	
Ile	His	Pro	Cys	Gly	Asn	Pro	Thr	Val	Ile	Glu	Asp	Ala	Leu	Asp	Lys
				85				90					95		
Ile	Lys	Ser	Asn	Asp	Pro	Asp	Thr	Thr	Glu	Val	Asn	Leu	Asn	Asn	Ile
			100				105						110		
Glu	Asn	Ile	Thr	Thr	Gln	Thr	Leu	Thr	Arg	Phe	Ala	Glu	Ala	Leu	Lys
		115					120					125			
Asp	Asn	Thr	Val	Val	Lys	Thr	Phe	Ser	Leu	Ala	Asn	Thr	His	Ala	Asp
		130				135					140				
Asp	Ser	Ala	Ala	Met	Ala	Ile	Ala	Glu	Met	Leu	Lys	Val	Asn	Glu	His
145				150					155					160	
Ile	Thr	Asn	Val	Asn	Val	Glu	Ser	Asn	Phe	Ile	Thr	Gly	Lys	Gly	Ile
				165				170						175	
Leu	Ala	Ile	Met	Arg	Ala	Leu	Gln	His	Asn	Thr	Val	Leu	Thr	Glu	Leu
			180					185					190		
Arg	Phe	His	Asn	Gln	Arg	His	Ile	Met	Gly	Ser	Gln	Val	Glu	Met	Glu
		195				200						205			
Ile	Val	Lys	Leu	Leu	Lys	Glu	Asn	Thr	Thr	Leu	Leu	Arg	Leu	Gly	Tyr
		210				215					220				
His	Phe	Glu	Leu	Pro	Gly	Pro	Arg	Met	Ser	Met	Thr	Ser	Ile	Leu	Thr

225		230		235		240									
Arg	Asn	Met	Asp	Lys	Gln	Arg	Gln	Lys	Arg	Leu	Gln	Glu	Gln	Lys	Gln
			245			250								255	
Gln	Glu	Gly	Tyr	Asp	Gly	Gly	Pro	Asn	Leu	Arg	Thr	Lys	Val	Trp	Gln
		260				265							270		
Arg	Gly	Thr	Pro	Ser	Pro	Ser	Pro	Tyr	Val	Ser	Pro	Arg	His	Ser	Pro
		275				280						285			
Trp	Ser	Ser	Pro	Lys	Leu	Pro	Tyr	Gly	Glu	Thr	Thr	Thr	Arg		
	290				295						300				

<210> 4839

<211> 1313

<212> DNA

<213> Homo sapiens

<400> 4839

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nnggcgctca gggccccac aagaggtcga ggaatgttg tgggctggg cacaccagca
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cggcagaaac tggagaaagc gagagacgtc gccagggacc cagggacctc tccctccagt
120
tccccgggcc cgcccgcccc tgatggccac tcacgctata gcgcccactc tgtcctgggc
180
catcccgccg cagcagtgtg gccccagacc cgggcgcctg aatgctctcc ctccggatcg
240
ctgctcgggt cccacttttg gcgaccgntg ccccgagtc ctgcttcccc ggggcctgct
300
ctgtatcagg cgctgcgcc ttcaagggtg cccggcccg ctgccctccc caagagccga
360
gtttgcgctc ctcccggaat cgtttgagag aaggacaaac ttttggcagg atggaaatct
420
agatgagcct gtccggagca gaacacccct gattagccag gccaccgcc atccacatct
480
gctcgcaaaa gaaggaaggc agcttgttcc agaccttggg gagcagctgc agactgcctg
540
cctagaacag cctccttact ccagcctggc agggaaggaa ggaacctgac ttgcttcgca
600
ggatctggaa gctcagccgg cagagctgag agccgcagtt gcatcctgga gcctgatgct
660
agaagcagct tccgtctttg ggttcttgct gcctcggcct ctgctctggt cagtttgctg
720
ttgtgttttt ctcccccatg ttgggttggt ggggtacagg gaaataaaat gctttctccc
780
aggcccttaa tcttcccca tgctccatc agcctcaaag ctgctgacag tcatgaactg
840
caccttcag cctgccccat aagctactca aagcaaattc aaattctctt ctggccaggg
900
ggaagggcag atgctccctc cttcctcaag cctccctggc tcattgatcc attttgaggg
960
catttggggg tcaaagtga gaccagattg cttcagtttg tataaaatta gcatttctta
1020
tcacaccaag gccacacctg ttctctggcc tcacaaacca gtgaggatgt aaaggtttgt
1080
tgaggtggag gaacagaagt gaaatgagca atctgctcca tttagaagtc agtcgcttcg
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<211> 3286

<212> DNA

<213> Homo sapiens

<400> 4845

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<212> PRT

<213> Homo sapiens

<400> 4846

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Phe	Glu	His	Asn	Gly	Glu	Arg	Arg	Ile	Ile	Ala	Phe	Ser	Arg	Pro	Val
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<211> 2804

<212> DNA

<213> Homo sapiens

<400> 4847

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<213> Homo sapiens

<400> 4850

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Gln	Glu	Arg	Gly	Ser	Ala	His	Leu	Val	Ala	Leu	Lys	Cys	Ile	Pro	Lys
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Lys	Ala	Leu	Arg	Gly	Lys	Glu	Ala	Leu	Val	Glu	Asn	Glu	Ile	Ala	Val
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Leu	Arg	Arg	Ile	Ser	His	Pro	Asn	Ile	Val	Ala	Leu	Glu	Asp	Val	His
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<210> 4851

<211> 820

<212> DNA

<213> Homo sapiens

<400> 4851

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<210> 4852

<211> 207

<212> PRT

<213> Homo sapiens

<400> 4852

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Ser	Ala	Ala	Leu	His	Arg	Arg	Val	Ala	Ala	Met	Arg	Glu	Ala	Gly	Thr
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Ala	Leu	Pro	Asp	Gln	Tyr	Gln	Glu	Asp	Ala	Ser	Asp	Met	Lys	Asp	Met
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Ser	Lys	Tyr	Lys	Pro	His	Ile	Leu	Leu	Ser	Gln	Glu	Asn	Thr	Gln	Ile
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His	Gln	Asp	Ala	Leu	Glu	Leu	Ile	Met	Ser	Lys	Tyr	Arg	Lys	Gln	Met
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Leu	Gln	Leu	Met	Val	Ala	Lys	Lys	Ala	Val	Asp	Ala	Glu	Pro	Val	Leu
		115					120					125			
Lys	Ala	His	Gln	Ser	His	Ser	Ala	Glu	Ile	Glu	Ser	Gln	Ile	Asp	Arg
		130					135					140			
Ile	Cys	Glu	Met	Gly	Glu	Val	Met	Arg	Lys	Ala	Val	Gln	Val	Asp	Asp
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Asp	Gln	Phe	Cys	Lys	Ile	Gln	Glu	Lys	Leu	Ala	Gln	Leu	Glu	Leu	Glu
			165					170						175	
Asn	Lys	Glu	Leu	Arg	Glu	Leu	Leu	Ser	Ile	Ser	Ser	Glu	Ser	Leu	Gln
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<211> 1467

<212> DNA

<213> Homo sapiens

<400> 4853

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<210> 4854

<211> 311

<212> PRT

<213> Homo sapiens

<400> 4854

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 35 40 45
 Arg Lys Val Glu Leu Pro Val Pro Thr His Arg Arg Pro Val Gln Ala
 50 55 60
 Trp Val Glu Ser Leu Arg Gly Phe Glu Gln Glu Arg Val Gly Leu Ala
 65 70 75 80
 Asp Leu His Pro Asp Val Phe Ala Thr Ala Pro Arg Leu Asp Ile Leu
 85 90 95
 His Gln Val Ala Met Trp Gln Lys Asn Phe Lys Arg Ile Ser Tyr Ala
 100 105 110
 Lys Thr Lys Thr Arg Ala Glu Val Arg Gly Gly Gly Arg Lys Pro Xaa
 115 120 125
 Ala Ala Glu Arg His Trp Ala Gly Pro Ala Trp Gln His Pro Leu Ser
 130 135 140
 Ala Leu Ala Arg Arg Arg Cys Cys Pro Trp Pro Pro Gly Pro Thr Ser
 145 150 155 160
 Tyr Tyr Tyr Met Leu Pro Met Lys Val Arg Ala Leu Gly Leu Lys Val
 165 170 175
 Ala Leu Thr Val Lys Leu Ala Gln Asp Asp Leu His Ile Met Asp Ser
 180 185 190
 Leu Glu Leu Pro Thr Gly Asp Pro Gln Tyr Leu Thr Glu Leu Ala His
 195 200 205
 Tyr Arg Arg Trp Gly Asp Ser Val Leu Leu Val Asp Leu Thr His Glu
 210 215 220
 Glu Met Pro Gln Ser Ile Val Glu Ala Thr Ser Arg Leu Lys Thr Phe
 225 230 235 240
 Asn Leu Ile Pro Ala Val Gly Leu Asn Val His Ser Met Leu Lys His
 245 250 255
 Gln Thr Leu Val Leu Thr Leu Pro Thr Val Ala Phe Leu Glu Asp Lys
 260 265 270
 Leu Leu Trp Gln Asp Ser Arg Tyr Arg Pro Leu Tyr Pro Phe Ser Leu
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 Pro Tyr Ser Asp Phe Pro Arg Pro Leu Pro His Ala Thr Gln Gly Pro
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 Ala Ala Thr Pro Tyr His Cys
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<210> 4855

<211> 750

<212> DNA

<213> Homo sapiens

<400> 4855

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120

tttgggacaa catctacaac tgcaggttct gcattcagct tttctgcccc aactaacaca

180

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240

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<210> 4856

<211> 237

<212> PRT

<213> Homo sapiens

<400> 4856

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		20					25						30		
Thr	Thr	Ala	Gly	Ser	Ala	Phe	Ser	Phe	Ser	Ala	Pro	Thr	Asn	Thr	Gly
		35					40						45		
Thr	Thr	Gly	Leu	Phe	Gly	Gly	Thr	Gln	Asn	Lys	Gly	Phe	Gly	Phe	Gly
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Thr	Gly	Phe	Gly	Thr	Thr	Thr	Gly	Thr	Ser	Thr	Gly	Leu	Gly	Thr	Gly
65					70					75					80
Leu	Gly	Thr	Gly	Leu	Gly	Phe	Gly	Gly	Phe	Asn	Thr	Gln	Gln	Gln	Gln
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Gln	Gln	Thr	Thr	Leu	Gly	Gly	Leu	Phe	Ser	Gln	Pro	Thr	Gln	Ala	Pro
		100					105						110		
Thr	Gln	Ser	Asn	Gln	Leu	Ile	Asn	Thr	Ala	Ser	Ala	Leu	Ser	Ala	Pro
	115						120						125		
Thr	Leu	Leu	Gly	Asp	Glu	Arg	Asp	Ala	Ile	Leu	Ala	Lys	Trp	Asn	Gln
	130						135					140			
Leu	Gln	Ala	Phe	Trp	Gly	Thr	Gly	Lys	Gly	Tyr	Phe	Asn	Asn	Asn	Ile
145			150							155					160
Pro	Pro	Val	Glu	Phe	Thr	Gln	Glu	Asn	Pro	Phe	Cys	Arg	Phe	Lys	Ala
			165						170					175	
Val	Gly	Tyr	Ser	Cys	Met	Pro	Ser	Asn	Lys	Asp	Glu	Asp	Gly	Leu	Val
		180						185					190		
Val	Leu	Val	Phe	Asn	Lys	Lys	Glu	Thr	Glu	Ile	Arg	Ser	Gln	Gln	Gln
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Gln	Leu	Val	Glu	Ser	Leu	His	Lys	Val	Leu	Gly	Gly	Asn	Gln	Thr	Leu
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<210> 4857

<211> 2887

<212> DNA

<213> Homo sapiens

<400> 4857

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<210> 4858

<211> 269
 <212> PRT
 <213> Homo sapiens

<400> 4858
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 35 40 45
 Gln Ala Lys Glu Lys Glu Ile Glu Glu Leu Lys Ser Glu Arg Asp Thr
 50 55 60
 Leu Leu Ala Arg Ile Glu Arg Met Glu Arg Arg Met Gln Leu Val Lys
 65 70 75 80
 Lys Asp Asn Glu Lys Glu Arg His Lys Leu Phe Gln Gly Tyr Glu Thr
 85 90 95
 Glu Glu Arg Glu Glu Thr Glu Leu Ser Glu Lys Ile Lys Leu Glu Cys
 100 105 110
 Gln Pro Glu Leu Ser Glu Thr Ser Gln Thr Leu Pro Pro Lys Pro Phe
 115 120 125
 Ser Cys Gly Arg Ser Gly Lys Gly His Lys Arg Lys Ser Pro Phe Gly
 130 135 140
 Ser Thr Glu Arg Lys Thr Pro Val Lys Lys Leu Ala Pro Glu Phe Ser
 145 150 155 160
 Lys Val Lys Thr Lys Thr Pro Lys His Ser Pro Ile Lys Glu Glu Pro
 165 170 175
 Cys Gly Ser Leu Ser Glu Thr Val Cys Lys Arg Glu Leu Arg Ser Gln
 180 185 190
 Glu Thr Pro Glu Lys Pro Arg Ser Ser Val Asp Thr Pro Pro Arg Leu
 195 200 205
 Ser Thr Pro Gln Lys Gly Pro Ser Thr His Pro Lys Glu Lys Ala Phe
 210 215 220
 Ser Ser Glu Ile Glu Asp Leu Pro Tyr Leu Ser Thr Thr Glu Met Tyr
 225 230 235 240
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<210> 4859
 <211> 689
 <212> DNA
 <213> Homo sapiens

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<210> 4860

<211> 173

<212> PRT

<213> Homo sapiens

<400> 4860

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		20						25				30			
Arg	Val	Ser	Gly	Gly	Leu	Pro	Arg	Cys	Leu	Cys	Trp	Val	Ala	Val	Val
		35						40				45			
Val	Pro	Arg	Gly	Met	Glu	Cys	Pro	Gly	Leu	Leu	Gln	Glu	Leu	Ser	Thr
	50					55				60					
Gln	Gly	Gln	Gly	Glu	Pro	Arg	Glu	Lys	Arg	Pro	Gly	Leu	Leu	Ser	Phe
65				70				75						80	
Leu	Ile	Cys	Ser	Cys	Pro	Pro	Leu	Ser	Ser	Thr	Pro	Leu	Pro	Phe	Pro
			85					90						95	
Arg	Leu	Ser	Pro	Pro	Trp	Ala	Phe	Val	Cys	Phe	Gly	Arg	Cys	His	Leu
			100					105					110		
Thr	Arg	Thr	Leu	Ile	Phe	Asn	Pro	Ile	Pro	Leu	Pro	Pro	Thr	Leu	Pro
			115				120						125		
His	Phe	Asp	Leu	Ile	Leu	Trp	Leu	Trp	Ala	Glu	Ala	Ser	Gln	Gly	Ser
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Trp	Val	Gly	Trp	Val	Leu	Arg	Pro	Pro	Gln	Thr	Ser	Thr	Glu	Thr	Cys
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<210> 4861

<211> 1622

<212> DNA

<213> Homo sapiens

<400> 4861

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<210> 4862
 <211> 260
 <212> PRT
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<400> 4862
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 35 40 45
 Leu Thr Arg His Leu Arg Asp Pro Phe Val Lys Ala Ala Lys Val Glu
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 Ser Tyr Arg Cys Arg Ser Ala Phe Lys Leu Leu Glu Val Asn Glu Arg
 65 70 75 80
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 Pro Gly Ala Trp Ser Gln Val Ala Val Gln Lys Val Asn Ala Ala Gly
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 115 120 125
 His Ile Phe Pro Leu Glu Gly Ala Thr Phe Leu Cys Pro Ala Asp Val
 130 135 140
 Thr Asp Pro Arg Thr Ser Gln Arg Ile Leu Glu Val Leu Pro Gly Arg
 145 150 155 160
 Arg Ala Asp Val Ile Leu Ser Asp Met Ala Pro Asn Ala Thr Gly Phe
 165 170 175
 Arg Asp Leu Asp His Asp Arg Leu Ile Ser Leu Cys Leu Thr Leu Leu
 180 185 190
 Ser Val Thr Pro Asp Ile Leu Gln Pro Gly Gly Thr Phe Leu Cys Lys
 195 200 205
 Thr Trp Ala Gly Ser Gln Ser Arg Arg Leu Gln Arg Arg Leu Thr Glu
 210 215 220
 Glu Phe Gln Asn Val Arg Ile Ile Lys Pro Glu Ala Ser Arg Lys Glu
 225 230 235 240
 Ser Ser Glu Val Tyr Phe Leu Ala Thr Gln Tyr His Gly Arg Lys Gly
 245 250 255
 Thr Val Lys Gln
 260

<210> 4863
 <211> 355
 <212> DNA
 <213> Homo sapiens

<400> 4863
 ctgggggctc actttcgggt gcacctggtg aagatgggtca ttctgacaga gcctgagggt
 60
 gccccaata tcacagccaa cctcacctcg tccctgctga gcgtctgtgg gtggagccag
 120
 accatcaacc ctgaggacga cacggatcct ggccatgctg acctggctct ctatatcact
 180

aggtttgacc tggagttgcc tgatggtaac nccggcagtgc ggggcgtcac ccagctgggc
 240
 ggggcctgct ccccaacctg gagctgctc attaccgagg aactggctt cgacctggga
 300
 gtcaccattg cccatgagat tgggcacagc ttcggcctgg agcacgacgg cgcgc
 355

<210> 4864

<211> 118

<212> PRT

<213> Homo sapiens

<400> 4864

Leu	Gly	Ala	His	Phe	Arg	Val	His	Leu	Val	Lys	Met	Val	Ile	Leu	Thr
1			5						10					15	
Glu	Pro	Glu	Gly	Ala	Pro	Asn	Ile	Thr	Ala	Asn	Leu	Thr	Ser	Ser	Leu
		20					25					30			
Leu	Ser	Val	Cys	Gly	Trp	Ser	Gln	Thr	Ile	Asn	Pro	Glu	Asp	Asp	Thr
		35				40					45				
Asp	Pro	Gly	His	Ala	Asp	Leu	Val	Leu	Tyr	Ile	Thr	Arg	Phe	Asp	Leu
	50					55					60				
Glu	Leu	Pro	Asp	Gly	Asn	Xaa	Ala	Val	Arg	Gly	Val	Thr	Gln	Leu	Gly
65					70					75				80	
Gly	Ala	Cys	Ser	Pro	Thr	Trp	Ser	Cys	Leu	Ile	Thr	Glu	Asp	Thr	Gly
			85					90					95		
Phe	Asp	Leu	Gly	Val	Thr	Ile	Ala	His	Glu	Ile	Gly	His	Ser	Phe	Gly
		100					105						110		
Leu	Glu	His	Asp	Gly	Ala										
		115													

<210> 4865

<211> 444

<212> DNA

<213> Homo sapiens

<400> 4865

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 60
 ctcacaaac accagcgac ccacactggc gagcgccct acaaatgtcc ccgttgcggc
 120
 aaggccttcg ccgacagctc ttacctgctt cgccaccagc gcactcactc tggccagaag
 180
 ccctacaagt gccacattg tggcaaggcc ttcggcgaca gctcctacct cctgcgacac
 240
 cagcgcaccc acagccacga gcggccctac agctgcaccg agtgcggcaa gtgctatagc
 300
 cagaactcgt ccctgcgcag ccatcagagg gtgcacaccg gtcagaggcc cttcagctgt
 360
 ggcatctgcg gcaagagctt ctcccagcgg tcggccctta tccccatgc ccgcagccac
 420
 gcccgggaga agcccttcac gcgt
 444

<210> 4866

<211> 148
 <212> PRT
 <213> Homo sapiens

<400> 4866

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Thr Gly Glu Lys Pro Tyr Lys Cys Glu Val Cys Ser Lys Ala Phe Ser
 1           5           10           15
Gln Ser Ser Asp Leu Ile Lys His Gln Arg Thr His Thr Gly Glu Arg
      20           25           30
Pro Tyr Lys Cys Pro Arg Cys Gly Lys Ala Phe Ala Asp Ser Ser Tyr
      35           40           45
Leu Leu Arg His Gln Arg Thr His Ser Gly Gln Lys Pro Tyr Lys Cys
      50           55           60
Pro His Cys Gly Lys Ala Phe Gly Asp Ser Ser Tyr Leu Leu Arg His
      65           70           75           80
Gln Arg Thr His Ser His Glu Arg Pro Tyr Ser Cys Thr Glu Cys Gly
      85           90           95
Lys Cys Tyr Ser Gln Asn Ser Ser Leu Arg Ser His Gln Arg Val His
      100          105          110
Thr Gly Gln Arg Pro Phe Ser Cys Gly Ile Cys Gly Lys Ser Phe Ser
      115          120          125
Gln Arg Ser Ala Leu Ile Pro His Ala Arg Ser His Ala Arg Glu Lys
      130          135          140
Pro Phe Thr Arg
145

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<210> 4867
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 4867

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ggatcccaga gggagttcta tctggacttg cccaagcag gttgctaggc agtagcctca
60
tatccttggt gggaggatga gaaggacaaa aagaggcaac cagcctaggg acatcggcct
120
ccttctccac atccccattc tggtaggaaa agtcacccat gccaggatat cccagccca
180
gagacagccc cagggggtgc tgcctggaga cagccgggat agcttcagtc tctgaccct
240
gacacgggct gcaccaccag acaatgggca ttttcaggcc agactctggc acaaagagaa
300
ggggcagggc caaggctatg gcccacaagc tcctcagcag ctgagatggg tgcaggaggt
360
agcgtcttac tcccatagct cccactgta t
391

```

<210> 4868
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 4868

```

Met Gly Val Glu Arg Tyr Leu Leu His Pro Ser Gln Leu Leu Arg Ser

```

```

      1           5           10           15
Leu Trp Ala Ile Ala Leu Ala Leu Pro Leu Leu Phe Val Pro Glu Ser
      20           25           30
Gly Leu Lys Met Pro Ile Val Trp Trp Cys Ser Pro Cys Gln Gly Gln
      35           40           45
Glu Thr Glu Ala Ile Pro Ala Val Ser Arg Gln His Pro Leu Gly Leu
      50           55           60
Ser Leu Gly Trp Gly Tyr Pro Gly Met Gly Asp Phe Ser Tyr Gln Asn
      65           70           75           80
Gly Asp Val Glu Lys Glu Ala Asp Val Pro Arg Leu Val Ala Ser Phe
      85           90           95
Cys Pro Ser His Pro Pro Thr Lys Asp Met Arg Leu Leu Pro Ser Asn
      100          105          110
Leu Leu Gly Ala Ser Pro Asp Arg Thr Pro Ser Gly Ile
      115          120          125

```

<210> 4869

<211> 418

<212> DNA

<213> Homo sapiens

<400> 4869

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cccgggaaga gggtcgcccc ccataaatgc ggaaacagtt aaatggcgat gggaatagga
60
tgggaaactca atggtgttgc tacctttgga tggactcgga ggcagcccag cttcctggga
120
caggactgca cggactgcct ggggaggggt ctttggcccc ccggttcctg caggggggct
180
cggggaggcc ctgtgagcag ttggtcacag gtgggtccca ttcgatgcga tcctgttcct
240
ccccaacagc cctggagaag ggggacgttg cctgctgtgg ctgcggtgtg tttcctggcc
300
tgtgagaggc ggggccagag tggccgttgg gaatctgggt gttgcaaggt gaccacaaac
360
agctctcttg gggaggagga ggaaaatgca attgattttc aggagccttc tgaggctg
418

```

<210> 4870

<211> 125

<212> PRT

<213> Homo sapiens

<400> 4870

```

Met Ala Met Gly Ile Gly Trp Glu Leu Asn Gly Val Ala Thr Phe Gly
      1           5           10           15
Trp Thr Arg Arg Gln Pro Ser Phe Leu Gly Gln Asp Cys Thr Asp Cys
      20           25           30
Leu Gly Arg Gly Leu Trp Pro Pro Gly Ser Cys Arg Gly Ala Arg Gly
      35           40           45
Gly Pro Val Ser Ser Trp Ser Gln Val Gly Pro Ile Arg Cys Asp Pro
      50           55           60
Val Pro Pro Gln Gln Pro Trp Arg Arg Gly Thr Leu Pro Ala Val Ala
      65           70           75           80
Ala Ala Val Phe Leu Ala Cys Glu Arg Arg Gly Gln Ser Gly Arg Trp

```

				85						90						95			
Glu	Ser	Gly	Cys	Cys	Lys	Val	Thr	Thr	Asn	Ser	Ser	Leu	Gly	Glu	Glu				
			100						105				110						
Glu	Glu	Asn	Ala	Ile	Asp	Phe	Gln	Glu	Pro	Ser	Glu	Val							
		115					120					125							

<210> 4871

<211> 1354

<212> DNA

<213> Homo sapiens

<400> 4871

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nntttttttt tttttttttt tttttctaga atccgcttta ttatggcacc tgggtgggtct
60
ggtgggatct gagggaggaa gaggtgcag tcttgctggg cagccccctcg gtcagtccag
120
cagccccctca ggccatgctg ctgctcagct gcatggcaaa gtctgcaca tgctcettca
180
gagtctggcg ggcatctgcc tgtgcccgt tctcccgctg ccgctcctgc tgcagcttgg
240
tcagtctcaa ccgcagccgc tgctcccgc gcttgaggc ctgcagctgg cgctgggcct
300
tgtcaagggc atcaagggt gcttggtcg ccgcttccag agtaaggcgc tgcccacctg
360
gtagctgtgt tcattctgga tgtaggtcc gccgggtggg ggcaggcgag catatacgct
420
gagggggaga ctggccgtgg ttcgagagg gagggctgcc gctctggtga aggctgggag
480
ctgcagcctg cttcatctgc ctgggcaccc aaggggcca gtaggtctga aaaggggctg
540
ctaaggccag gctccagcct ccagctggg gagggcgga aagtggcagg tgctgaggcc
600
tcttcacag gaaagcaggt gacatcagca ggtggagggt gagaaaatgg agttgtgggc
660
cctcgccct cgagcagcg cttcctgcat cgtctaagcc ggctgacttc aggggggcca
720
ggtgggtaac tgtgtcctt ggtcttggt gtccggcgca acttgagaa agactcaaat
780
atggtgggga ctgccccctc ctttagcctg tgatatccac tgattccac cagctcaaag
840
cagtcctcct caaagtgtt ggagcagaag tagatgtact cggatgccg gtcccacagg
900
ccctggccgc tgggtgccag ccgctggcag ttggccagcc acaagcctcg cctcggttg
960
tccttcttg gaagtctgtg gagccacaaa cccgtgagca ccaggctgtc cacagccctg
1020
ggctcatgct gcccaagcac ccagagggg aaacgcagac ccaacacgcg ccgccacgag
1080
acctccctgc gaccccgccg ggtaagcacc accgcccggg cacagacgag gcaacggagg
1140
cctcgagaag aaaagcagtt tcctcagcgt catctggcag gtaacagagt ggggcgggtc
1200
caagccggt agacttccg tcctccctt cccgactgca ttcagtccg ccgggaccgt
1260

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tccgcttcac ctcccacca caggttcaag ctcctcagt atctgagaaa ggcgcgaagc
 1320
 ctctacgcag ttgcgacccg aggcgagcaa caac
 1354

<210> 4872
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 4872
 Gly Arg Lys Arg Leu Gln Ser Cys Trp Ala Ala Pro Arg Ser Val Gln
 1 5 10 15
 Gln Pro Leu Arg Pro Cys Cys Cys Ser Ala Ala Trp Gln Ser Pro Ala
 20 25 30
 His Ala Pro Ser Glu Ser Gly Gly His Leu Pro Val Pro Ala Ser Pro
 35 40 45
 Val Pro Ala Pro Ala Ala Ala Trp Ser Val Ser Thr Ala Ala Ala Ala
 50 55 60
 Pro Ala Ala Cys Arg Pro Ala Ala Gly Ala Gly Pro Cys Gln Gly His
 65 70 75 80
 Gln Gly Leu Pro Gly Ser Pro Leu Pro Glu
 85 90

<210> 4873
 <211> 948
 <212> DNA
 <213> Homo sapiens

<400> 4873
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 60
 agattgcctt gatagaggac tgatgttttt cactgatgag atggtgacca aaagccagcc
 120
 ccactgtgag ttgaactctt tcgtgttgac cggccactct ccgtgctctg gatgatgtcg
 180
 gaacacgacc tggccgatgt gggtcaaatt gcagtggaag acctgagccc tgaccaccca
 240
 ggtacagagc tgtgggacag tggtgttttg gagaatcatg tagtgacaga tgaagacgaa
 300
 cctgctttga aacgccagcg actagaaatc aattgccagg atccatctat aaagtcattc
 360
 ctgtattcca tcaaccagac aatctgcttg cggttgata gcattgaagc caaattgcaa
 420
 gccctggagg ctacttgtaa atccttagaa gaaaagctgg atctggtcac gaacaagcag
 480
 cacagcccca tccaggttcc catggtggcc ggctccctc tcaggacaac ccagatgtgc
 540
 aacaaagtgc gatggtgaaga acagaccagg gtgccggggc cttcaggtca cttggggaga
 600
 agcgcgtcac ctctcgccc atgccgcag cttagtggct cagtttgctg gagatgcgca
 660
 gtgtctgect cagcagtctc agcagtttct aactaaagct gacttttagtt agaccgaaac
 720

cgaacacatg gcacccctgcc aggatgacct gaagtcaccc tcaccccttcc ttccacata
 780
 aagccggccc atacaccttt tctttggaac taaccaccca gatcttagaa gatgtacacg
 840
 tgcttcttcc ctttttcccta ctctacctgg ctagtcttta gatatgtttt tcttcgtatg
 900
 tgggtgtttat acatttcaca tgaatatatc aaacttttca ttcaaaaa
 948

<210> 4874

<211> 128

<212> PRT

<213> Homo sapiens

<400> 4874

Met	Met	Ser	Glu	His	Asp	Leu	Ala	Asp	Val	Val	Gln	Ile	Ala	Val	Glu
1				5					10					15	
Asp	Leu	Ser	Pro	Asp	His	Pro	Gly	Thr	Glu	Leu	Trp	Asp	Ser	Val	Val
			20					25					30		
Leu	Glu	Asn	His	Val	Val	Thr	Asp	Glu	Asp	Glu	Pro	Ala	Leu	Lys	Arg
		35				40					45				
Gln	Arg	Leu	Glu	Ile	Asn	Cys	Gln	Asp	Pro	Ser	Ile	Lys	Ser	Phe	Leu
	50				55					60					
Tyr	Ser	Ile	Asn	Gln	Thr	Ile	Cys	Leu	Arg	Leu	Asp	Ser	Ile	Glu	Ala
65				70				75					80		
Lys	Leu	Gln	Ala	Leu	Glu	Ala	Thr	Cys	Lys	Ser	Leu	Glu	Glu	Lys	Leu
			85					90					95		
Asp	Leu	Val	Thr	Asn	Lys	Gln	His	Ser	Pro	Ile	Gln	Val	Pro	Met	Val
			100					105				110			
Ala	Gly	Ser	Pro	Leu	Arg	Thr	Thr	Gln	Met	Cys	Asn	Lys	Val	Arg	Trp
		115				120						125			

<210> 4875

<211> 1255

<212> DNA

<213> Homo sapiens

<400> 4875

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 120
 tggacgcagt tttagaaaga gcgttttcgc tacgtaaagc acattcgata aaggatatgg
 180
 aaaatacttt gcagctgggtg agaaatatca tacctcctct gtcttcaca aagcacaag
 240
 ggcaagatgg aagaataggc gtagttggag gctgtcagga gtacactgga gccccatatt
 300
 ttgcagcaat ctacgctctc aaagtgggag cagacttgct ccacgtgttc tgtgccagt
 360
 cggccgcacc tgtgattaag gcctacagcc cggagctgat cgtccacca gttcttgaca
 420
 gccccaatgc tgttcagtag gtggagaagt ggctgccccg gctgcatgct cttgtcgtag
 480

gacctggcctt gggtagagat gatcgtccac ccagttcttg acagcccaa tgctgttcat
 540
 gaggtggaga agtggctgcc ccggctgcat gctcttgcg taggaactgg cttgggtaga
 600
 gatgatgcgc ttctcagaaa tgtccagggc attttggaag tgtcaaaggc cagggacatc
 660
 cctgttgtca tcgacgcgga tggcctgtgg ctggtcgctc agcagccggc cctcatccat
 720
 ggctaccgga aggctgtgct cactcccaac cacgtggagt tcagcagact gtatgacgct
 780
 gtgctcagag gccctatgga cagcgatgac agccatggat ctgtgctaag actcagccaa
 840
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 960
 ctgtcgggct ccttggcggt cctggtacac tgggcgctcc ttgctggacc acagaaaaca
 1020
 aatgggtcca gccctctcct ggtggcgcg tttggcgctt gctctctcac caggcagtgc
 1080
 aaccaccaag ccttccagaa gcacggctgc tccaccacca cctccgacat gatcgccgag
 1140
 gtggggggccg ccttcagcaa gctctttgaa acctgagccc gcgcagacca gaagtaaaca
 1200
 ggacaccttg acgggggaga gcgtgtgtgt gatgggaaaa tccggaccca cgcgt
 1255

<210> 4876

<211> 230

<212> PRT

<213> Homo sapiens

<400> 4876

Leu	Ala	Trp	Val	Glu	Met	Ile	Val	His	Pro	Val	Leu	Asp	Ser	Pro	Asn
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Ala	Val	His	Glu	Val	Glu	Lys	Trp	Leu	Pro	Arg	Leu	His	Ala	Leu	Val
		20						25					30		
Val	Gly	Thr	Gly	Leu	Gly	Arg	Asp	Asp	Ala	Leu	Leu	Arg	Asn	Val	Gln
	35					40						45			
Gly	Ile	Leu	Glu	Val	Ser	Lys	Ala	Arg	Asp	Ile	Pro	Val	Val	Ile	Asp
	50					55					60				
Ala	Asp	Gly	Leu	Trp	Leu	Val	Ala	Gln	Gln	Pro	Ala	Leu	Ile	His	Gly
65					70				75					80	
Tyr	Arg	Lys	Ala	Val	Leu	Thr	Pro	Asn	His	Val	Glu	Phe	Ser	Arg	Leu
			85					90						95	
Tyr	Asp	Ala	Val	Leu	Arg	Gly	Pro	Met	Asp	Ser	Asp	Asp	Ser	His	Gly
		100					105						110		
Ser	Val	Leu	Arg	Leu	Ser	Gln	Ala	Leu	Gly	Asn	Val	Thr	Val	Val	Gln
		115				120					125				
Lys	Gly	Glu	Arg	Asp	Ile	Leu	Ser	Asn	Gly	Gln	Gln	Val	Leu	Val	Cys
	130					135					140				
Ser	Gln	Glu	Gly	Ser	Ser	Arg	Arg	Cys	Gly	Gly	Gln	Gly	Asp	Leu	Leu
145				150						155				160	
Ser	Gly	Ser	Leu	Gly	Val	Leu	Val	His	Trp	Ala	Leu	Leu	Ala	Gly	Pro

[illegible]

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<210> 4877
<211> 1182
<212> DNA
<213> Homo sapiens
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<400> 4877
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120
gttcaatgaa tgcgtgcgga atgaatgaac gactctagt aaagagactc caatgacgca
180
ggccgggatt tgcggacacg agccccgcgc cgcaagcat tctggggatt gtagtttctc
240
cgtgacgagg tgactcgacg agcactgacg cactctgcgc ccggaggaca gagcggcccc
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gtcgccggca tggtttctcc gtccctgctgc agccggcggg aggcagccag tccaggcgcc
360
cgctagcttc ggccggcacc cagacgggga aagcggaagg aatgtcgcgt gcaagcaggc
420
agctgggtgtg gaagaatggc ggtgagccat tcagtgaagg agcggaccat ctctgagaac
480
agcctgatca tcctactgca gggcctccag ggccgggtaa ccactgtgga cctgcgggat
540
gagagcgtgg ccacaggacg catagacaat gtcgatgctt tcatgaacat ccgcctggcc
600
aaagtcacct acacggaccg ttggggggcat caggtcaagc tggatgacct ctttgtgaca
660
ggccgcaatg tccgctacgt ccacatccca gatgacgtga acatcacctc gaccattgag
720
cagcagctgc agattatcca tcgggtgcga aactttggtg gcaagggcca aggccgggtg
780
gaatttcccc caaaaaaact gtaagtgagg ccctcagcaa gccctggccc caactcggag
840
tcctccagtg atctccggag ctagtccct gccctcacac cctgtctggt acccgagaag
900
aaagcagggc caggccagaa gctgggtgtcc aacagacacc acctgtcaaa gctgcctttc
960
acagggttcc acctcccaga ctactctgg gaccagaat cctatatgtg gccttggggg
1020
aggtgacaat ccccttttt gatgatctga atctctgact tattgattat ggaacctgtc
1080
aagtagtttt caactctccc agtgaggata attaaacatg cttagcctga gccacctcta
1140

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agtgtctcca tttctcatgc agttgtgttc attttctcat ga
1182

<210> 4878

<211> 122

<212> PRT

<213> Homo sapiens

<400> 4878

Met	Ala	Val	Ser	His	Ser	Val	Lys	Glu	Arg	Thr	Ile	Ser	Glu	Asn	Ser	
1				5					10					15		
Leu	Ile	Ile	Leu	Leu	Gln	Gly	Leu	Gln	Gly	Arg	Val	Thr	Thr	Val	Asp	
			20					25					30			
Leu	Arg	Asp	Glu	Ser	Val	Ala	His	Gly	Arg	Ile	Asp	Asn	Val	Asp	Ala	
			35				40					45				
Phe	Met	Asn	Ile	Arg	Leu	Ala	Lys	Val	Thr	Tyr	Thr	Asp	Arg	Trp	Gly	
	50				55						60					
His	Gln	Val	Lys	Leu	Asp	Asp	Leu	Phe	Val	Thr	Gly	Arg	Asn	Val	Arg	
65				70					75					80		
Tyr	Val	His	Ile	Pro	Asp	Asp	Val	Asn	Ile	Thr	Ser	Thr	Ile	Glu	Gln	
			85					90					95			
Gln	Leu	Gln	Ile	Ile	His	Arg	Val	Arg	Asn	Phe	Gly	Gly	Lys	Gly	Gln	
			100				105						110			
Gly	Arg	Trp	Glu	Phe	Pro	Pro	Lys	Lys	Leu							
		115					120									

<210> 4879

<211> 1941

<212> DNA

<213> Homo sapiens

<400> 4879

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120
gctgggcttg gaggatgcct ctccgaccca ctgatgctgg gggcgagga ctcggtcaag
180
ggaggggcaa gaggaggagg agagcctgcc gttccaactt gccatcaga gaccggaca
240
cggcctggtg tgtggcttgc tgctgggag ggatgcacag ggcctcctga gggacaggat
300
ggacctggtc agaggacggt tgctgtcctc atttgctttc caagaagagc atgtcctccc
360
tcgagaaaca gtgccggcgg tgtgatgagc acttacacc acgttctcaa gggcagattc
420
tctcatgaca tccgtggagc ttgcgaggca gcgtggactg gtgactgtga aggaaggccc
480
ccgtggtaga atgagctgga gcacgtctta agagagatgc ctgcttecta aagatctaca
540
gcaatctggg acgtgggtta agttcaagac ttgaaggaag caaagacgcc ctgcatgggt
600
acaatggctc aggtgtcagg ggaggccgga ggttttccag catttgctc atgccagcac
660

ctttgaaccg gtctcttaga agaagacaca catcctgggt gtacagtggg gaaatgggga
 720
 gtgggtgccc attctgaaaa acgaggcatt cctgctcatt ccctctgctt agctgggtggg
 780
 caggggagag agggaaatgc caaaaacttg gagtgaagga tgatgctatt ttttattttt
 840
 aaatatatct tcaggttatt ttcttactgt tgcttcagat ctaatgtaaa aggcagatgt
 900
 cccctcctct ccacccccga cgctgacccc ggcctcagtc acggctcttt gcatgatcac
 960
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<210> 4880

<211> 202

<212> PRT

<213> Homo sapiens

<400> 4880

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<210> 4881
<211> 1333
<212> DNA
<213> Homo sapiens
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<210> 4882

<211> 100

<212> PRT

<213> Homo sapiens

<400> 4882

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			20					25					30		
Leu	Pro	Phe	Leu	Pro	Ser	Gln	Pro	Leu	Gly	Phe	Gly	Tyr	Met	Thr	Gln
		35					40				45				
Gln	Leu	Met	Asn	Leu	Ala	Gly	Gly	Ala	Val	Val	Leu	Ala	Leu	Glu	Gly
		50				55				60					
Gly	His	Asp	Leu	Thr	Ala	Ile	Cys	Asp	Ala	Ser	Glu	Ala	Cys	Val	Ala
65					70				75					80	
Ala	Leu	Leu	Gly	Asn	Arg	Val	Ser	Arg	Leu	Pro	Pro	Pro	Ser	Met	Leu
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<210> 4883

<211> 1371

<212> DNA

<213> Homo sapiens

<400> 4883

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<210> 4884<211> 410

<212> PRT

<213> Homo sapiens

<400> 4884

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		20					25					30			
Leu	Arg	Leu	Leu	Asn	Phe	Gln	His	Asn	Phe	Ile	Thr	Arg	Ile	Gln	Asn
	35						40					45			


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Ile Ser Asn Leu Gln Lys Leu Ile Ser Leu Asp Leu Tyr Asp Asn Gln
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Ile Glu Glu Ile Ser Gly Leu Ser Thr Leu Arg Cys Leu Arg Val Leu
65          70          75          80
Leu Leu Gly Lys Asn Arg Ile Lys Lys Ile Ser Asn Leu Glu Asn Leu
          85          90          95
Lys Ser Leu Asp Val Leu Asp Leu His Gly Asn Gln Ile Thr Lys Ile
          100          105          110
Glu Asn Ile Asn His Leu Cys Glu Leu Arg Val Leu Asn Leu Ala Arg
          115          120          125
Asn Phe Leu Ser His Val Asp Asn Leu Asn Gly Leu Asp Ser Leu Thr
          130          135          140
Glu Leu Asn Leu Arg His Asn Gln Ile Thr Phe Val Arg Asp Val Asp
145          150          155          160
Asn Leu Pro Cys Leu Gln His Leu Phe Leu Ser Phe Asn Asn Ile Ser
          165          170          175
Ser Phe Asp Ser Val Ser Cys Leu Ala Asp Ser Ser Ser Leu Ser Asp
          180          185          190
Ile Thr Phe Asp Gly Asn Pro Ile Ala Gln Glu Ser Trp Tyr Lys His
          195          200          205
Thr Val Leu Gln Asn Met Met Gln Leu Arg Gln Leu Asp Met Lys Arg
          210          215          220
Ile Thr Glu Glu Glu Arg Arg Met Ala Ser Val Leu Ala Lys Lys Glu
225          230          235          240
Glu Glu Lys Lys Arg Glu Ser His Lys Gln Ser Leu Leu Lys Glu Lys
          245          250          255
Lys Arg Leu Thr Ile Asn Asn Val Ala Arg Gln Trp Asp Leu Gln Gln
          260          265          270
Arg Val Ala Asn Ile Ala Thr Asn Glu Asp Arg Lys Asp Ser Asp Ser
          275          280          285
Pro Gln Asp Pro Cys Gln Ile Asp Gly Ser Thr Leu Ser Ala Phe Pro
          290          295          300
Glu Glu Thr Gly Pro Leu Asp Ser Gly Leu Asn Asn Ala Leu Gln Gly
305          310          315          320
Leu Ser Val Ile Asp Thr Tyr Leu Val Glu Val Asp Gly Asp Thr Leu
          325          330          335
Ser Leu Tyr Gly Ser Gly Ala Leu Glu Ser Leu Asp Arg Asn Trp Ser
          340          345          350
Val Gln Thr Ala Gly Met Ile Thr Thr Val Ser Phe Thr Phe Ile Glu
          355          360          365
Phe Asp Glu Ile Val Gln Val Leu Pro Lys Leu Lys Ile Lys Phe Pro
          370          375          380
Asn Ser Leu His Leu Lys Phe Lys Glu Thr Asn Leu Val Met Gln Gln
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<210> 4885

<211> 489

<212> DNA

<213> Homo sapiens

<400> 4885

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<210> 4886

<211> 77

<212> PRT

<213> Homo sapiens

<400> 4886

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			20					25					30		
Val	Asn	Phe	Thr	Arg	Xaa	Glu	Trp	Arg	Glu	Leu	Asp	Leu	Ala	Gln	Arg
		35					40					45			
Val	Leu	Tyr	Arg	Asp	Val	Met	Leu	Glu	Asn	Tyr	Arg	Asn	Leu	Val	Ser
	50					55					60				
Leu	Val	Gly	Phe	Pro	Phe	Ser	Lys	Pro	Gly	Ile	Ile	Ser			
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<210> 4887

<211> 2271

<212> DNA

<213> Homo sapiens

<400> 4887

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 300
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 360

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<210> 4888

<211> 429

<212> PRT

<213> Homo sapiens

<400> 4888

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			20				25						30		
Ser	Ala	His	Tyr	His	Val	Asn	Phe	Ser	Gln	Ala	Ile	Ser	Gln	Asp	Val
		35				40					45				
Asn	Leu	His	Glu	Ala	Ile	Leu	Leu	Cys	Pro	Asn	Asn	Thr	Phe	Arg	Arg
50					55					60					
Asp	Pro	Thr	Ala	Arg	Thr	Ser	Gln	Ser	Gln	Glu	Pro	Phe	Leu	Gln	Leu
65					70					75				80	
Asn	Ser	His	Thr	Thr	Asn	Pro	Glu	Gln	Thr	Leu	Pro	Gly	Thr	Asn	Leu
			85					90					95		
Thr	Gly	Phe	Leu	Ser	Pro	Val	Asp	Asn	His	Met	Arg	Asn	Leu	Thr	Ser
		100					105						110		
Gln	Asp	Leu	Leu	Tyr	Asp	Leu	Asp	Ile	Asn	Ile	Phe	Asp	Glu	Ile	Asn
	115				120							125			
Leu	Met	Ser	Leu	Ala	Thr	Glu	Asp	Asn	Phe	Asp	Pro	Ile	Asp	Val	Ser
	130				135						140				
Gln	Leu	Phe	Asp	Glu	Pro	Asp	Ser	Asp	Ser	Gly	Leu	Ser	Leu	Asp	Ser
145					150					155				160	
Ser	His	Asn	Asn	Thr	Ser	Val	Ile	Lys	Ser	Asn	Ser	Ser	His	Ser	Val
			165					170						175	
Cys	Asp	Glu	Gly	Ala	Ile	Gly	Tyr	Cys	Thr	Asp	His	Glu	Ser	Ser	Ser
		180					185					190			
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	195					200						205			
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	210					215					220				
Thr	Phe	Gln	His	Val	Phe	His	Asn	His	Thr	Tyr	His	Leu	Gln	Pro	Thr
225					230					235				240	
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			245					250						255	
Lys	Ile	Arg	Ser	Arg	Tyr	Leu	Glu	Asp	Pro	Asp	Arg	Thr	Leu	Ser	Arg
		260					265					270			
Asp	Asp	Gln	Arg	Ala	Lys	Ala	Leu	His	Ile	Pro	Phe	Ser	Val	Asp	Glu
	275					280						285			
Ile	Val	Gly	Met	Pro	Val	Asp	Ser	Phe	Asn	Ser	Met	Leu	Ser	Arg	Tyr

290 295 300
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 Gly Lys Asn Lys Val Ala Ala Gln Asn Cys Arg Lys Arg Lys Leu Asp
 325 330 335
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 340 345 350
 Glu Thr Leu Lys Arg Glu Gln Ala Gln Cys Asn Lys Ala Ile Asn Ile
 355 360 365
 Met Lys Gln Lys Leu His Asp Leu Tyr His Asp Ile Phe Ser Arg Leu
 370 375 380
 Arg Asp Asp Gln Gly Arg Pro Val Asn Pro Asn His Tyr Ala Leu Gln
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 <212> DNA
 <213> Homo sapiens

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<210> 4890
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 <212> PRT
 <213> Homo sapiens

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		20		25		30									
Arg	Thr	Gly	Gln	Pro	Gln	Pro	Ala	Pro	Thr	Arg	Val	Asn	Ile	Ser	Arg
		35		40		45									
Pro	Ser	Pro	Thr	Leu	Phe	Pro	Asp	Ser	Gln	Gln	Thr	Asp	Val	Gly	Ser
		50		55		60									
Arg	Thr	Asp	Pro	Phe	Thr	His	Thr	His	Thr	His	Ser	His	Ser	Phe	Ala
65				70		75									80
His	Ile	His	Ser	Cys	Thr	His	Ala	Met	Tyr						
				85		90									

<210> 4891

<211> 1998

<212> DNA

<213> Homo sapiens

<400> 4891

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<212> PRT

<213> Homo sapiens

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Ser	Arg	Arg	Ala	Asp	Gly	Gln	Glu	Asp	Tyr	Leu	Pro	Ser	Ser	Thr	Val
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<212> DNA

<213> Homo sapiens

<400> 4895

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		20		25		30									
Arg	Gln	Gln	Arg	Gly	Pro	Leu	Gly	Trp	Val	Gly	Val	Leu	Leu	Asp	Ser
	35			40		45									
Gly	Gly	Gly	Glu	His	Leu	Pro	Phe	Pro	Gln	Pro	Cys	Val	His	Pro	Gln
	50			55		60									
Met	Leu	Leu	Ala	His	Arg	Ile	Ser	Gln	Cys	His	Gly	Pro	Thr	Thr	Ala
65				70		75									80
Arg	Leu	Gly	Pro	Val	Ser	Gly	Gln	His	Pro	Glu	Gly	Gln	Gly	Pro	Ser
			85			90								95	
Val	Leu	Thr	Lys	Glu	Ala	Leu	Gly	Val	Ala	Val	Pro	Ala	Pro	Met	Gly
			100			105							110		
Leu	Leu	Leu	Gly	Arg	Gly										
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<210> 4901

<211> 1520

<212> DNA

<213> Homo sapiens

<400> 4901

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120
gcacggcggc gtgctgcgct gttgaggacg ctgtcccggc cgctcccagg ccgccccgag
180
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240
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960

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 1080
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<210> 4902

<211> 184

<212> PRT

<213> Homo sapiens

<400> 4902

Met	Ser	Gly	Gln	Arg	Val	Asp	Val	Lys	Val	Val	Met	Leu	Gly	Lys	Glu
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Tyr	Val	Gly	Lys	Thr	Ser	Leu	Val	Glu	Arg	Tyr	Val	His	Asp	Arg	Phe
		20						25				30			
Leu	Val	Gly	Pro	Tyr	Gln	Asn	Thr	Ile	Gly	Ala	Ala	Phe	Val	Ala	Lys
		35					40					45			
Val	Met	Ser	Val	Gly	Asp	Arg	Thr	Val	Thr	Leu	Gly	Ile	Trp	Asp	Thr
	50					55				60					
Ala	Gly	Ser	Glu	Arg	Tyr	Glu	Ala	Met	Ser	Arg	Ile	Tyr	Tyr	Arg	Gly
65			70					75				80			
Ala	Lys	Ala	Ala	Ile	Val	Cys	Tyr	Asp	Leu	Thr	Asp	Ser	Ser	Ser	Phe
		85						90				95			
Glu	Arg	Ala	Lys	Phe	Trp	Val	Lys	Glu	Leu	Arg	Ser	Leu	Glu	Glu	Gly
		100					105					110			
Cys	Gln	Ile	Tyr	Leu	Cys	Gly	Thr	Lys	Ser	Asp	Leu	Leu	Glu	Glu	Asp
	115						120					125			
Arg	Arg	Arg	Arg	Arg	Val	Asp	Phe	His	Asp	Val	Gln	Asp	Tyr	Ala	Asp
	130					135				140					
Ser	Ser	Cys	Ser	Ser	Ala	Leu	Trp	Gly	Val	Gly	Val	Cys	Gly	Cys	Leu
145			150					155				160			
Gly	Gly	Ser	Lys	Lys	Ile	Gly	Thr	Ala	Leu	Ala	Ala	Arg	Ala	Arg	Cys
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Ser	Arg	Arg	Ser	Ser	Trp	Pro	Pro								
			180												

<210> 4903

<211> 1064

<212> DNA

<213> Homo sapiens

<400> 4903

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120
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180
gaaaggagag gtggggcctt cagtagaaac aagcaaaccg cagtccctgt ggggggactc
240
tccaggaaga aggttccgca agaaccgtgg gcgacagtta tggagaagcg tctgcaggag
300
gctcagctgt acaaggagga agggaaccag cgctaccggg aaggggaagta ccgagatgct
360
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420
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480
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540
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600
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660
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720
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780
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840
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900
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960
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1064

<210> 4904

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4904

Cys	Trp	Ala	Ser	Leu	Phe	Pro	His	Pro	Phe	Pro	Tyr	Tyr	Leu	Pro	Ala
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Leu	Leu	Glu	Lys	Lys	Thr	Ala	Glu	Arg	Arg	Gly	Gly	Ala	Phe	Ser	Arg
			20					25					30		
Asn	Lys	Gln	Thr	Ala	Val	Pro	Val	Gly	Gly	Leu	Ser	Arg	Lys	Lys	Val
		35					40					45			
Pro	Gln	Glu	Pro	Trp	Ala	Thr	Val	Met	Glu	Lys	Arg	Leu	Gln	Glu	Ala

50		55		60	
Gln	Leu	Tyr	Lys	Glu	Glu
65		70		75	80
Arg	Asp	Ala	Val	Ser	Arg
		85		90	95
Leu	Asp	Pro	Xaa	Ser	Ala
		100		105	

<210> 4905
 <211> 615
 <212> DNA
 <213> Homo sapiens

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 180
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 480
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 615

<210> 4906
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 4906
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 20 25 30
 Gln Leu Pro Trp Glu Ala Leu Gly Arg Leu Gly Asn Val Asn Thr Leu
 35 40 45
 Gly Leu Asp His Asn Leu Leu Ala Ser Val Pro Ala Gly Ala Phe Ser
 50 55 60
 Arg Leu His Lys Leu Ala Arg Leu Asp Met Thr Ser Asn Arg Leu Thr
 65 70 75 80
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<210> 4907
<211> 1748
<212> DNA
<213> Homo sapiens
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 1320
 cgcggctccc cctccnccgc ttccaactct ccttcgtcgc caaactgctg cttgcggccg
 1380
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 1560
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 1620
 gcactggccg aaacgaaatg cagggaagg tccgagtcgc ctccgcctc acttggtag
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 1748

<210> 4908
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 4908
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 Gly His Arg Arg Ala Ser Leu
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<210> 4909
 <211> 1960
 <212> DNA
 <213> Homo sapiens

<400> 4909
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<210> 4910

<211> 423

<212> PRT

<213> Homo sapiens

<400> 4910

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 20           25           30
Phe Met Pro Ile Leu Met Glu Lys Glu Glu Glu Gly Met Leu Ser Pro
 35           40           45
Ile Leu Ala His Gly Gly Val Arg Phe Met Trp Ile Lys His Asn Asn
 50           55           60
Leu Tyr Leu Val Ala Thr Ser Lys Lys Asn Ala Cys Val Ser Leu Val
 65           70           75           80
Phe Ser Phe Leu Tyr Lys Val Val Gln Val Phe Ser Glu Tyr Phe Lys
 85           90           95
Glu Leu Glu Glu Glu Ser Ile Arg Asp Asn Phe Val Ile Ile Tyr Glu
 100          105          110
Leu Leu Asp Glu Leu Met Asp Phe Gly Phe Pro Gln Thr Thr Asp Ser
 115          120          125
Lys Ile Leu Gln Glu Tyr Ile Thr Gln Gln Ser Asn Lys Leu Glu Thr
 130          135          140
Gly Lys Ser Arg Val Pro Thr Val Thr Asn Ala Val Ser Trp Arg
 145          150          155          160
Ser Glu Gly Ile Lys Tyr Lys Lys Asn Glu Val Phe Ile Asp Val Ile
 165          170          175
Glu Ser Val Asn Leu Leu Val Asn Ala Asn Gly Ser Val Leu Leu Ser
 180          185          190
Glu Ile Val Gly Thr Ile Lys Met Arg Val Phe Leu Ser Gly Met Pro
 195          200          205
Glu Leu Arg Leu Gly Leu Asn Asp Lys Val Leu Phe Asp Asn Thr Gly
 210          215          220
Arg Gly Lys Ser Lys Ser Val Glu Leu Glu Asp Val Lys Phe His Gln
 225          230          235          240
Cys Val Arg Leu Ser Arg Phe Glu Asn Asp Arg Thr Ile Ser Phe Ile
 245          250          255
Pro Pro Asp Gly Glu Phe Glu Leu Met Ser Tyr Arg Leu Asn Thr His
 260          265          270
Val Lys Pro Leu Ile Trp Ile Glu Ser Val Ile Glu Lys Phe Ser His
 275          280          285
Ser Arg Ile Glu Tyr Met Val Lys Ala Lys Gly Gln Phe Lys Lys Gln
 290          295          300
Ser Val Ala Asn Gly Val Glu Ile Ser Val Pro Val Pro Ser Asp Ala
 305          310          315          320
Asp Ser Pro Arg Phe Lys Thr Ser Val Gly Ser Ala Lys Tyr Val Pro
 325          330          335
Glu Arg Asn Val Val Ile Trp Ser Ile Lys Ser Phe Pro Gly Gly Lys
 340          345          350
Glu Tyr Leu Met Arg Ala His Phe Gly Leu Pro Ser Val Glu Lys Glu
 355          360          365
Glu Val Glu Gly Arg Pro Pro Ile Gly Val Lys Phe Glu Ile Pro Tyr

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370		375		380	
Phe Thr Val Ser Gly Ile Gln Val Arg Tyr Met Lys Ile Ile Glu Lys					
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Ser Gly Tyr Gln Ala Leu Pro Trp Val Arg Tyr Ile Thr Gln Ser Gly					
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Asp Tyr Gln Leu Arg Thr Ser					
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<210> 4911

<211> 1862

<212> DNA

<213> Homo sapiens

<400> 4911

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<210> 4912

<211> 453

<212> PRT

<213> Homo sapiens

<400> 4912

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Val	Lys	Arg	Asn	Phe	Leu	Glu	Ala	Leu	Lys	Ser	Asn	Asp	Phe	Gly	Lys
		20						25					30		
Leu	Lys	Ala	Ile	Leu	Ile	Gln	Arg	Gln	Ile	Asp	Val	Asp	Thr	Val	Phe
		35				40						45			
Glu	Val	Glu	Asp	Glu	Asn	Met	Val	Leu	Ala	Ser	Tyr	Lys	Gln	Gly	Tyr
	50				55					60					
Trp	Leu	Pro	Ser	Tyr	Lys	Leu	Lys	Ser	Ser	Trp	Ala	Thr	Gly	Leu	His
65				70					75					80	
Leu	Ser	Val	Leu	Phe	Gly	His	Val	Glu	Cys	Leu	Leu	Val	Leu	Leu	Asp
			85					90					95		
His	Asn	Ala	Thr	Ile	Asn	Cys	Arg	Pro	Asn	Gly	Lys	Thr	Pro	Leu	His
		100						105					110		
Val	Ala	Cys	Glu	Met	Ala	Asn	Val	Asp	Cys	Val	Lys	Ile	Leu	Cys	Asp
		115				120						125			
Arg	Gly	Ala	Lys	Leu	Asn	Cys	Tyr	Ser	Leu	Ser	Gly	His	Thr	Ala	Leu
	130					135					140				
His	Phe	Cys	Thr	Thr	Pro	Ser	Ser	Ile	Leu	Cys	Ala	Lys	Gln	Leu	Val
145				150				155						160	
Trp	Arg	Val	Thr	Gln	Val	Asn	His	Met	Leu	Gly	Asn	Ser	Leu	Val	Asn
			165					170					175		
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Val Asn Glu Val Glu His Gly Ala Asn Val Asn Met Lys Thr Asn Asn
      195      200      205
Gln Asp Glu Glu Thr Pro Leu His Thr Ala Ala His Phe Gly Leu Ser
      210      215      220
Glu Leu Val Ala Phe Tyr Val Glu His Gly Ala Ile Val Asp Ser Val
      225      230      235
Asn Ala His Met Glu Thr Pro Leu Ala Ile Ala Ala Tyr Trp Ala Leu
      245      250      255
Arg Phe Lys Glu Gln Glu Tyr Ser Thr Glu His His Leu Val Cys Arg
      260      265      270
Met Leu Leu Asp Tyr Lys Ala Glu Val Asn Ala Arg Asp Asp Asp Phe
      275      280      285
Lys Ser Pro Leu His Lys Ala Ala Trp Asn Cys Asp His Val Leu Met
      290      295      300
His Met Met Leu Glu Ala Gly Ala Glu Ala Asn Leu Met Asp Ile Asn
      305      310      315
Gly Cys Ala Ala Ile Gln Tyr Val Leu Lys Val Thr Ser Val Arg Pro
      325      330      335
Ala Ala Gln Pro Glu Ile Cys Tyr Gln Leu Leu Leu Asn His Gly Ala
      340      345      350
Ala Arg Ile Tyr Pro Pro Gln Phe His Lys Val Ile Gln Ala Cys His
      355      360      365
Ser Cys Pro Lys Ala Ile Glu Val Val Val Asn Ala Tyr Glu His Ile
      370      375      380
Arg Trp Asn Thr Lys Trp Arg Arg Ala Ile Pro Asp Asp Asp Leu Glu
      385      390      395
Val Asn Asn Arg Phe Pro Ser Asn Ser Phe His Tyr Gln Val Leu Pro
      405      410      415
Asp Cys Ser Arg Ser Thr Glu Asn Cys Asn Lys Lys Val Gly Phe Glu
      420      425      430
Asn Ala Phe Lys Ala Tyr Ser Asn Ala Met Arg Gln Arg Val Ile Lys
      435      440      445
Cys Arg Phe Glu Ser
      450

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<210> 4913

<211> 2090

<212> DNA

<213> Homo sapiens

<400> 4913

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120
ccgctcttgc ccggcgctggc gactcgctag cgtcagcagc gccgcagccg gacgagaaag
180
cggaagatgg cggcgggcggc cgggaggccg tgaggagagc ggcggtgcg agggcgggccg
240
atggcgggccg ggaggcgccc tcggacactt gcgggtcggt agggcgcgac gctggggaggc
300
atgtcggagc acgtggagcc cgcagctccg gggcccgggc ccaacggcgg cggcgggcggc
360

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ccggcccccg cgcgcggggc tcgcaccccc aatctcaacc ccaacccccct catcaacgtg
420
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480
ccgcccgcct tccgccgtct cttcgagttc ttcgtgctgc tcaaggccct gtttgtgctc
540
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600
gtgcgtgaca agtggccgcg tgagggcatc ctgcgtgtgg aagtgcggca caactcgagc
660
cgcgcgcccc tcttcctaca gttctgtgac agcggcgggc gcgggagctt cccgggcctg
720
gccgtggaac caggcagcaa cctggacatg gaagatgagg aggaggaaga gctgaccatg
780
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840
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900
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960
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1020
cccacgcggg accagtgctt cggggaccgc ttcagccgcc tgctgctgga tgagttcctg
1080
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1140
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1200
cggacgtcct acctggccgc cttcgccatc atggtcatct tcacgtgag cgtgtccatg
1260
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1920
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 2090

<210> 4914

<211> 529

<212> PRT

<213> Homo sapiens

<400> 4914

Met	Ser	Glu	His	Val	Glu	Pro	Ala	Ala	Pro	Gly	Pro	Gly	Pro	Asn	Gly
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Gly	Gly	Gly	Gly	Pro	Ala	Pro	Ala	Arg	Gly	Pro	Arg	Thr	Pro	Asn	Leu
			20					25					30		
Asn	Pro	Asn	Pro	Leu	Ile	Asn	Val	Arg	Asp	Arg	Leu	Phe	His	Ala	Leu
		35					40					45			
Phe	Phe	Lys	Met	Ala	Val	Thr	Tyr	Ser	Arg	Leu	Phe	Pro	Pro	Ala	Phe
	50					55					60				
Arg	Arg	Leu	Phe	Glu	Phe	Val	Leu	Leu	Lys	Ala	Leu	Phe	Val	Leu	
65					70				75					80	
Phe	Val	Leu	Ala	Tyr	Ile	His	Ile	Val	Phe	Ser	Arg	Ser	Pro	Ile	Asn
				85					90					95	
Cys	Leu	Glu	His	Val	Arg	Asp	Lys	Trp	Pro	Arg	Glu	Gly	Ile	Leu	Arg
			100					105					110		
Val	Glu	Val	Arg	His	Asn	Ser	Ser	Arg	Ala	Pro	Val	Phe	Leu	Gln	Phe
		115					120					125			
Cys	Asp	Ser	Gly	Gly	Arg	Gly	Ser	Phe	Pro	Gly	Leu	Ala	Val	Glu	Pro
						135					140				
Gly	Ser	Asn	Leu	Asp	Met	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Leu	Thr	Met
145					150				155					160	
Glu	Met	Phe	Gly	Asn	Ser	Ser	Ile	Lys	Phe	Glu	Leu	Asp	Ile	Glu	Pro
				165					170					175	
Lys	Val	Phe	Lys	Pro	Pro	Ser	Ser	Thr	Glu	Ala	Leu	Asn	Asp	Ser	Gln
		180						185					190		
Glu	Phe	Pro	Phe	Pro	Glu	Thr	Pro	Thr	Lys	Val	Trp	Pro	Gln	Asp	Glu
		195					200					205			
Tyr	Ile	Val	Glu	Tyr	Ser	Leu	Glu	Tyr	Gly	Phe	Leu	Arg	Leu	Ser	Gln
	210					215					220				
Ala	Thr	Arg	Gln	Arg	Leu	Ser	Ile	Pro	Val	Met	Val	Val	Thr	Leu	Asp
225					230					235				240	
Pro	Thr	Arg	Asp	Gln	Cys	Phe	Gly	Asp	Arg	Phe	Ser	Arg	Leu	Leu	Leu
				245					250					255	
Asp	Glu	Phe	Leu	Gly	Tyr	Asp	Asp	Ile	Leu	Met	Ser	Ser	Val	Lys	Gly
		260						265					270		
Leu	Ala	Glu	Asn	Glu	Glu	Asn	Lys	Gly	Phe	Leu	Arg	Asn	Val	Val	Ser
		275					280						285		
Gly	Glu	His	Tyr	Arg	Phe	Val	Ser	Met	Trp	Met	Ala	Arg	Thr	Ser	Tyr
	290						295				300				
Leu	Ala	Ala	Phe	Ala	Ile	Met	Val	Ile	Phe	Thr	Leu	Ser	Val	Ser	Met
305					310					315				320	
Leu	Leu	Arg	Tyr	Ser	His	His	Gln	Ile	Phe	Val	Phe	Ile	Val	Asp	Leu
				325					330					335	
Leu	Gln	Met	Leu	Glu	Met	Asn	Met	Ala	Ile	Ala	Phe	Pro	Ala	Ala	Pro

```

      340      345      350
Leu Leu Thr Val Ile Leu Ala Leu Val Gly Met Glu Ala Ile Met Ser
      355      360      365
Glu Phe Phe Asn Asp Thr Thr Ala Phe Tyr Ile Ile Leu Ile Val
      370      375      380
Trp Leu Ala Asp Gln Tyr Asp Ala Ile Cys Cys His Thr Ser Thr Ser
      385      390      395      400
Lys Arg His Trp Leu Arg Phe Phe Tyr Leu Tyr His Phe Ala Phe Tyr
      405      410      415
Ala Tyr His Tyr Arg Phe Asn Gly Gln Tyr Ser Ser Leu Ala Leu Val
      420      425      430
Thr Ser Trp Leu Phe Ile Gln His Ser Met Ile Tyr Phe Phe His His
      435      440      445
Tyr Glu Leu Pro Ala Ile Leu Gln Gln Val Arg Ile Gln Glu Met Leu
      450      455      460
Leu Gln Ala Pro Pro Leu Gly Pro Gly Thr Pro Thr Ala Leu Pro Asp
      465      470      475      480
Asp Met Asn Asn Asn Ser Gly Ala Pro Ala Thr Ala Pro Asp Ser Ala
      485      490      495
Gly Gln Pro Pro Ala Leu Gly Pro Val Phe Glu Leu Val Ser Lys Glu
      500      505      510
Arg Gly Trp Gly Ser Ala Glu Gly Ser Gly Gly Val Leu Val Gly Leu
      515      520      525
Gln

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<210> 4915

<211> 1157

<212> DNA

<213> Homo sapiens

<400> 4915

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120
tctcagtcac caagactgca ggagaggcaa ggccatgtca ggcttggcag ctgtggctgg
180
ggccaggagg gagggaccag gcccatgttg gaacaggaca aatgcccaag gccacatcct
240
tcgtccacag tcttgaggct cctgccaggc tgacaggaaa cagcccagag ctgaggtctt
300
tgagccggtc attccaacat tgcaagcacc acccagtcct cctggctgaa gttgagttag
360
gtaagaaggg cccgtggcca gggacagga gggccctcag gaggtccca gggctgctgc
420
tgaggccggg cagcgtccta ggctcaagg acactcctt ctccccgtg cccaagcca
480
ccatggcagc agcatcaggg ctgtgccgcc tcatcccat ccctgtctgg gcagatgtga
540
agggtgaccg tctccccac tgtccgaag ttgacggtct gggtggaag ctctgtggtg
600
aagctgctct ggccactgtc cgcagaacgc cggatgcggg tgcagaaaga ctgcgtccag
660

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ggagcactgc ccacaggccg agccggggcc tcccgcaaga ggaaggaggt gccctcaagg
 720
 ctacggacct ggggtcccgg tggtagcgcc ccacggggct caggcctaaa gaggccgaga
 780
 gggcctcggg gaccagtgcc agccccacgc tgagcagcac aggctgcccc accgtgggct
 840
 ccccgatctc tctctggatc accgagacct cgcaggagg gtcacaggg gcgccaggcc
 900
 cagggccacc acagtggag gtctcccctt cccagggcac gtaatcttcc aggtcagcca
 960
 gtgtcagcat gcggccgttg tgcgtgagga tcttggggtc acgatcccca aggtgtgtg
 1020
 tgtctggga ctctccgctc acaaagagag tctccgtctt cccctcttc ctagtccgc
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 1157

<210> 4916

<211> 59

<212> PRT

<213> Homo sapiens

<400> 4916

Met	Arg	Val	Gln	Lys	Asp	Cys	Val	Gln	Gly	Ala	Leu	Pro	Thr	Gly	Arg
1				5					10					15	
Ala	Gly	Ala	Ser	Arg	Lys	Arg	Lys	Glu	Val	Pro	Ser	Arg	Leu	Arg	Thr
			20					25					30		
Trp	Gly	Pro	Gly	Gly	Asp	Ala	Pro	Arg	Gly	Ser	Gly	Leu	Lys	Arg	Pro
		35					40					45			
Arg	Gly	Pro	Arg	Gly	Pro	Ser	Ala	Ala	Pro	Arg					
		50					55								

<210> 4917

<211> 1544

<212> DNA

<213> Homo sapiens

<400> 4917

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 120
 cagtctgggc gcgagagccg ccaagcggc actccgttcc tctggtgcc ccgcccgtc
 180
 cggccgcggc cccgcccctc ccggcgcccc gccccgtccg gcagcggcct cgctccctcc
 240
 gatccccccc gcgcccggga cccctggccc cactgttggg ccagctcgcc gggctcggcc
 300
 atgggccccg ccgctcgccc cgcgtgaga tcgcccgcgc cgcctccgcc gccgcctccg
 360
 tctccgtgc tgctgtgtgt gccctgtgt ccgctgtggc tgggcctggc ggggcccggg
 420

gccgcggcgg acggcagcga gccggcggcc ggggcggggc ggggcggagc ccgcgcgctg
 480
 cgggtggacg tgagactgcc gcgccaggac gctctggtcc tggagggcgt caggatcggc
 540
 tccgaagccg acccggcgcc cctgctgggc ggtcgtctgc tgctgatgga tgcctggat
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 gctgagcagg aggcacccgc agatggctgg attgcagtgg catatgtggg caaggagcag
 660
 gcggcccagt tccaccagga gaataagggc agtggccgc aggcctatcc caaggccctg
 720
 gtccagcaga tgcggcgggc cctcttcctg ggtgcctctg ccctgcttct tctcatcctg
 780
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 840
 ctccattatt cctccaatgt caccaagctg ttggatgcat tgctgcagag gaccaggcc
 900
 acggctgaga tcaccagcgg agagtccctg tctgccata tcgagtggaa gttgacctg
 960
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 1140
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 1200
 gcacccctca agacacggcg ctgccggctg agcagggcag cgcagggcct cccagatccg
 1260
 ggtgctgaga cctgtgcggt gtgcctggac tacttctgca acaaacaggc tagtgccccg
 1320
 gtggctccgg gtgctgcctt gtaagcacga gtttcaccga gactgtgtgg acccctggct
 1380
 gatgctccag cagacctgcc cactgtgcaa attcaacgtc ctgggtgagc accaggggtg
 1440
 gggtcctcgt gcctactctg cctgctcctc acctgatgcc tctctccctg ttcttcttcc
 1500
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 1544

<210> 4918

<211> 347

<212> PRT

<213> Homo sapiens

<400> 4918

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Pro	Pro	Pro	Pro	Ser	Pro	Leu	Leu	Leu	Leu	Leu	Pro	Leu	Leu	Pro	Leu
			20					25					30		
Trp	Leu	Gly	Leu	Ala	Gly	Pro	Gly	Ala	Ala	Ala	Asp	Gly	Ser	Glu	Pro
		35					40					45			
Ala	Ala	Gly	Ala	Gly	Arg	Gly	Gly	Ala	Arg	Ala	Val	Arg	Val	Asp	Val
		50				55					60				
Arg	Leu	Pro	Arg	Gln	Asp	Ala	Leu	Val	Leu	Glu	Gly	Val	Arg	Ile	Gly

```

65          70          75          80
Ser Glu Ala Asp Pro Ala Pro Leu Leu Gly Gly Arg Leu Leu Leu Met
          85          90          95
Asp Val Val Asp Ala Glu Gln Glu Ala Pro Ala Asp Gly Trp Ile Ala
          100          105          110
Val Ala Tyr Val Gly Lys Glu Gln Ala Ala Gln Phe His Gln Glu Asn
          115          120          125
Lys Gly Ser Gly Pro Gln Ala Tyr Pro Lys Ala Leu Val Gln Gln Met
          130          135          140
Arg Arg Ala Leu Phe Leu Gly Ala Ser Ala Leu Leu Leu Ile Leu
145          150          155          160
Asn His Asn Val Val Arg Glu Leu Asp Ile Ser Gln Leu Leu Leu Arg
          165          170          175
Pro Val Ile Val Leu His Tyr Ser Ser Asn Val Thr Lys Leu Leu Asp
          180          185          190
Ala Leu Leu Gln Arg Thr Gln Ala Thr Ala Glu Ile Thr Ser Gly Glu
          195          200          205
Ser Leu Ser Ala Asn Ile Glu Trp Lys Leu Thr Leu Trp Thr Thr Cys
          210          215          220
Gly Leu Ser Lys Asp Gly Tyr Gly Gly Trp Gln Asp Leu Val Cys Leu
225          230          235          240
Gly Gly Ser Arg Ala Gln Glu Gln Lys Pro Leu Gln Gln Leu Trp Asn
          245          250          255
Ala Ile Leu Leu Val Ala Met Leu Leu Cys Thr Gly Leu Val Val Gln
          260          265          270
Ala Gln Arg Gln Ala Ser Arg Gln Ser Gln Arg Glu Leu Gly Gly Gln
          275          280          285
Val Asp Leu Phe Lys Arg Arg Val Val Arg Arg Leu Ala Ser Leu Lys
          290          295          300
Thr Arg Arg Cys Arg Leu Ser Arg Ala Ala Gln Gly Leu Pro Asp Pro
305          310          315          320
Gly Ala Glu Thr Cys Ala Val Cys Leu Asp Tyr Phe Cys Asn Lys Gln
          325          330          335
Ala Ser Ala Pro Val Ala Pro Gly Ala Ala Leu
          340          345

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<210> 4919

<211> 1362

<212> DNA

<213> Homo sapiens

<400> 4919

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ncggaggcgg gcacttgagg ggaaagtga gacgtgatta ccgggttggg cgggccccat
60

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ctgggagggg tttgtgggtg aactcggggt ccaccgcccg ctgaggagat ggatgaggac
120

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gggcttcttc tcatggggtc aggcataagc ctgaccaagg tgccagctat tcaacagaaa
180

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agaacggtgg cttttctaaa ccaatttgtg gtgcacactg tacagttcct caaccgcttt
240

```

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tctacagttt gtgaggagaa actggcagac ctttcacttc gtatccaaca aattgaaaca
300

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actctcaata ttttagatgc aaagtgtgca tctatcccag gcctagatga tgtcacagtt
360

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gaagtatctc ctttaaagt caccagtgtc acaaattggag cacatctga agccacttca
 420
 gagcaaccac agcagaacag tacacaagac tctggactac aggaaagtga agtatcagca
 480
 gaaaatatct taactgtagc caaggatcca agatatgcca gatattctca aatgggttcaa
 540
 gtgggtgtac cagtgatggc aataagaaac aaaatgatat cagaaggact agaccagat
 600
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 660
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 720
 catgcatagg ggtacattta cattctgtaa gagattgagc ctgaactctc ttagtcataa
 780
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 840
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 900
 ttnggatacc ctaaataaag taccaattag tgctccaaat actaagatag aatatttttag
 960
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 1020
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 1260
 tggcgacaag agtgaaactc tgtcttaaaa ataaaaagag atgcaatgag caatttttaa
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 1362

<210> 4920

<211> 194

<212> PRT

<213> Homo sapiens

<400> 4920

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Lys	Val	Pro	Ala	Ile	Gln	Gln	Lys	Arg	Thr	Val	Ala	Phe	Leu	Asn	Gln
			20					25					30		
Phe	Val	Val	His	Thr	Val	Gln	Phe	Leu	Asn	Arg	Phe	Ser	Thr	Val	Cys
			35				40					45			
Glu	Glu	Lys	Leu	Ala	Asp	Leu	Ser	Leu	Arg	Ile	Gln	Gln	Ile	Glu	Thr
			50				55				60				
Thr	Leu	Asn	Ile	Leu	Asp	Ala	Lys	Leu	Ser	Ser	Ile	Pro	Gly	Leu	Asp
65					70					75				80	
Asp	Val	Thr	Val	Glu	Val	Ser	Pro	Leu	Asn	Val	Thr	Ser	Val	Thr	Asn
				85					90					95	
Gly	Ala	His	Pro	Glu	Ala	Thr	Ser	Glu	Gln	Pro	Gln	Gln	Asn	Ser	Thr

4094

actaaacaga tacaaaatat ggagcagaaa ggaaaaccca ctggggaggt agaggaaatg
 1080
 acagagaaac cagaaatgac agcagaggag aagcaaacat tactaaagag gagattgctt
 1140
 gcagagaaac tcaaagaaga agttattaat aagtaataat taagaacaat ttaacaaaat
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 1260
 aaaaaataaa aa
 1272

<210> 4922

<211> 342

<212> PRT

<213> Homo sapiens

<400> 4922

Met	Ala	Ala	Glu	Glu	Glu	Asp	Glu	Val	Glu	Trp	Val	Val	Glu	Ser	Ile
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Ala	Gly	Leu	Leu	Arg	Gly	Pro	Asp	Trp	Ser	Ile	Pro	Ile	Leu	Asp	Phe
		20					25					30			
Val	Glu	Gln	Lys	Cys	Glu	Val	Phe	Asp	Asp	Glu	Glu	Glu	Ser	Lys	Leu
		35				40					45				
Thr	Tyr	Thr	Glu	Ile	His	Gln	Glu	Tyr	Lys	Glu	Leu	Val	Glu	Lys	Leu
	50				55				60						
Leu	Glu	Gly	Tyr	Leu	Lys	Glu	Ile	Gly	Ile	Asn	Glu	Asp	Gln	Phe	Gln
65				70				75					80		
Glu	Ala	Cys	Thr	Ser	Pro	Leu	Ala	Lys	Thr	His	Thr	Ser	Gln	Ala	Ile
			85					90					95		
Leu	Gln	Pro	Val	Leu	Ala	Ala	Glu	Asp	Phe	Thr	Ile	Phe	Lys	Ala	Met
		100					105						110		
Met	Val	Gln	Lys	Asn	Ile	Glu	Met	Gln	Leu	Gln	Ala	Ile	Arg	Ile	Ile
		115				120					125				
Gln	Glu	Arg	Asn	Gly	Val	Leu	Pro	Asp	Cys	Leu	Thr	Asp	Gly	Ser	Asp
	130				135						140				
Val	Val	Ser	Asp	Leu	Glu	His	Glu	Glu	Met	Lys	Ile	Leu	Arg	Glu	Val
145				150					155					160	
Leu	Arg	Lys	Ser	Lys	Glu	Glu	Tyr	Asp	Gln	Glu	Glu	Glu	Arg	Lys	Arg
			165					170					175		
Lys	Lys	Gln	Leu	Ser	Glu	Ala	Lys	Thr	Glu	Glu	Pro	Thr	Val	His	Ser
		180					185						190		
Ser	Glu	Ala	Ala	Ile	Met	Asn	Asn	Ser	Gln	Gly	Asp	Gly	Glu	His	Phe
		195				200						205			
Ala	His	Pro	Pro	Ser	Glu	Val	Lys	Met	His	Phe	Ala	Asn	Gln	Ser	Ile
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Glu	Pro	Leu	Gly	Arg	Lys	Val	Glu	Arg	Ser	Glu	Thr	Ser	Ser	Leu	Pro
225				230					235					240	
Gln	Lys	Gly	Leu	Lys	Ile	Pro	Gly	Leu	Glu	His	Ala	Ser	Ile	Glu	Gly
			245					250						255	
Pro	Ile	Ala	Asn	Leu	Ser	Val	Leu	Gly	Thr	Glu	Glu	Leu	Arg	Gln	Arg
		260					265						270		
Glu	His	Tyr	Leu	Lys	Gln	Lys	Arg	Asp	Lys	Leu	Met	Ser	Met	Arg	Lys
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<213> Homo sapiens
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<212> PRT
<213> Homo sapiens
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      20          25          30
Ser Ala Ser Arg Ser Ser Ser Ala Ser Lys Ser Ser Ser Ser Val Pro
      35          40          45
Ser Ser Ser Ser Ser Ser Gly Ser Leu Met His Arg Leu Ala Ile Phe

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      50              55              60
Ser Met Ala Ser Ile Gly Lys Gly Pro Leu Pro Leu Ser Phe Ser Arg
65              70              75              80
Ala Gly Gly Trp Pro Thr Lys Ala Lys Asn Ser Ala Ser Ser Ser
      85              90              95
Ser Ser Leu Ala Pro Ser Ser Gly Ile Ile Arg Pro Ser Gly Glu Arg
      100              105              110
Ser Thr Ser Arg Pro Ser Trp Arg Ala Ala Ala Ala Pro Leu Pro Gly
      115              120              125
Gly Pro Gly Gly Pro Ser Ser Cys Ala Ser Ser Arg Leu Asp Ala Arg
      130              135              140
Thr Thr Cys Pro Gln Ala Arg Pro Cys Pro Ala Pro Ser Pro Gly Ser
145              150              155              160
Val Ala Ala His Ser Pro Phe Leu Ser Pro Ala Leu Leu Val Gly Ala
      165              170              175
Leu Arg Pro Val Asp Pro Glu Pro Ser Leu Pro Cys Leu Ala Val Pro
      180              185              190
Leu Pro Pro Arg Ala Ser Gly Ala Ala Ala Pro Xaa Ser Ala Ala Ser
      195              200              205
Trp Ala Arg Arg Gly Leu Pro Ser Arg Asn Tyr Asn Ser Arg Gln Ile
      210              215              220
Ser Gln Gly Glu Asp Lys Met Thr Lys Arg Lys Lys Leu Arg Thr Ser
225              230              235              240
Ala Pro Leu Met Arg Lys Gln Asp Leu Pro Ala Gly Ser Ser Val
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<212> DNA

<213> Homo sapiens

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agtgatgagg ccgaggacgc tgagctctat gatgaccttt actgcccagc atgtgacaaa
180
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<210> 4926

<211> 124

<212> PRT

<213> Homo sapiens

<400> 4926

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      20           25           30
Lys Asp Glu Glu Asp Gly Lys Asp Ser Asp Glu Ala Glu Asp Ala Glu
      35           40           45
Leu Tyr Asp Asp Leu Tyr Cys Pro Ala Cys Asp Lys Ser Phe Lys Thr
      50           55           60
Glu Lys Ala Met Lys Asn His Glu Lys Ser Lys Lys His Arg Glu Met
      65           70           75           80
Val Ala Leu Leu Lys Gln Gln Leu Glu Glu Glu Glu Asn Phe Ser
      85           90           95
Arg Pro Gln Ile Asp Glu Asn Pro Leu Asp Asp Asn Ser Glu Glu Glu
      100           105           110
Met Glu Asp Ala Pro Lys Gln Lys Leu Ser Lys Lys
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<210> 4927

<211> 1649

<212> DNA

<213> Homo sapiens

<400> 4927

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660
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720
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960

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 1140
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<211> 405

<212> PRT

<213> Homo sapiens

<400> 4928

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Ser	His	Lys	Asp	Leu	Ala	Gly	Lys	Tyr	Arg	Gln	Ile	Leu	Glu	Lys	Ala
			20					25					30		
Ile	Gln	Leu	Ser	Gly	Ala	Glu	Gln	Leu	Glu	Ala	Leu	Lys	Ala	Phe	Val
		35				40						45			
Glu	Ala	Met	Val	Asn	Glu	Asn	Val	Ser	Leu	Val	Ile	Ser	Arg	Gln	Leu
	50				55					60					
Leu	Thr	Asp	Phe	Cys	Thr	His	Leu	Pro	Asn	Leu	Pro	Asp	Ser	Thr	Ala
65				70					75					80	
Lys	Glu	Ile	Tyr	His	Phe	Thr	Leu	Glu	Lys	Ile	Gln	Pro	Arg	Val	Ile
			85					90					95		
Ser	Phe	Glu	Glu	Gln	Val	Ala	Ser	Ile	Arg	Gln	His	Leu	Ala	Ser	Ile
		100					105					110			
Tyr	Glu	Lys	Glu	Glu	Asp	Trp	Arg	Asn	Ala	Ala	Gln	Val	Leu	Val	Gly
	115					120					125				
Ile	Pro	Leu	Glu	Thr	Gly	Gln	Lys	Gln	Tyr	Asn	Val	Asp	Tyr	Lys	Leu
	130				135					140					
Glu	Thr	Tyr	Leu	Lys	Ile	Ala	Arg	Leu	Tyr	Leu	Glu	Asp	Asp	Asp	Pro
145				150					155					160	
Val	Gln	Ala	Glu	Ala	Tyr	Ile	Asn	Arg	Ala	Ser	Leu	Leu	Gln	Asn	Glu
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<211> 5907
<212> DNA
<213> Homo sapiens
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540
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<210> 4930

<211> 648

<212> PRT

<213> Homo sapiens

<400> 4930

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			20					25								
Val	Gln	Gln	Phe	Gly	Tyr	Gln	Arg	Ala	Ser	Asp	Asp	Gly	Lys	Leu		45
			35				40									
Thr	Asp	Pro	Ser	Lys	Thr	Ser	Asn	Thr	Ile	Arg	Val	Phe	Leu	Pro	Asn	60
	50					55					60					
Lys	Gln	Arg	Thr	Val	Val	Asn	Val	Arg	Asn	Gly	Met	Ser	Leu	His	Asp	80
65				70						75						
Cys	Leu	Met	Lys	Ala	Leu	Lys	Val	Arg	Gly	Leu	Gln	Pro	Glu	Cys	Cys	95
				85					90							
Ala	Val	Phe	Arg	Leu	Leu	His	Glu	His	Lys	Gly	Lys	Lys	Ala	Arg	Leu	110
			100					105								
Asp	Trp	Asn	Thr	Asp	Ala	Ala	Ser	Leu	Ile	Gly	Glu	Glu	Leu	Gln	Val	125
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Asp	Phe	Leu	Asp	His	Val	Pro	Leu	Thr	Thr	His	Asn	Phe	Ala	Arg	Lys	140
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Thr	Phe	Leu	Lys	Leu	Ala	Phe	Cys	Asp	Ile	Cys	Gln	Lys	Phe	Leu	Leu	160
145				150						155						
Asn	Gly	Phe	Arg	Cys	Gln	Thr	Cys	Gly	Tyr	Lys	Phe	His	Glu	His	Cys	175
			165					170								
Ser	Thr	Lys	Val	Pro	Thr	Met	Cys	Val	Asp	Trp	Ser	Asn	Ile	Arg	Gln	190
		180					185						190			
Leu	Leu	Leu	Phe	Pro	Asn	Ser	Thr	Ile	Gly	Asp	Ser	Gly	Val	Pro	Ala	205
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Leu	Pro	Ser	Leu	Thr	Met	Arg	Arg	Met	Arg	Glu	Ser	Val	Ser	Arg	Met	220
	210				215						220					
Pro	Val	Ser	Ser	Gln	His	Arg	Tyr	Ser	Thr	Pro	His	Ala	Phe	Thr	Phe	

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Ser	Thr	Ser	Thr	Pro	Asn	Val	His	Met	Val	Ser	Thr	Thr	Leu	Pro	Val												
			260					265					270														
Asp	Ser	Arg	Met	Ile	Glu	Asp	Ala	Ile	Arg	Ser	His	Ser	Glu	Ser	Ala												
		275					280				285																
Ser	Pro	Ser	Ala	Leu	Ser	Ser	Ser	Pro	Asn	Asn	Leu	Ser	Pro	Thr	Gly												
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Trp	Ser	Gln	Pro	Lys	Thr	Pro	Val	Pro	Ala	Gln	Arg	Glu	Arg	Ala	Pro												
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Val	Ser	Gly	Thr	Gln	Glu	Lys	Asn	Lys	Ile	Arg	Pro	Arg	Gly	Gln	Arg												
			325					330						335													
Asp	Ser	Ser	Tyr	Tyr	Trp	Glu	Ile	Glu	Ala	Ser	Glu	Val	Met	Leu	Ser												
			340					345					350														
Thr	Arg	Ile	Gly	Ser	Gly	Ser	Phe	Gly	Thr	Val	Tyr	Lys	Gly	Lys	Trp												
	355					360						365															
His	Gly	Asp	Val	Ala	Val	Lys	Ile	Leu	Lys	Val	Val	Asp	Pro	Thr	Pro												
	370					375					380																
Glu	Gln	Phe	Gln	Ala	Phe	Arg	Asn	Glu	Val	Ala	Val	Leu	Arg	Lys	Thr												
385					390					395				400													
Arg	His	Val	Asn	Ile	Leu	Leu	Phe	Met	Gly	Tyr	Met	Thr	Lys	Asp	Asn												
			405					410						415													
Leu	Ala	Ile	Val	Thr	Gln	Trp	Cys	Glu	Gly	Ser	Ser	Leu	Tyr	Lys	His												
		420						425				430															
Leu	His	Val	Gln	Glu	Thr	Lys	Phe	Gln	Met	Phe	Gln	Leu	Ile	Asp	Ile												
	435					440					445																
Ala	Arg	Gln	Thr	Ala	Gln	Gly	Met	Asp	Tyr	Leu	His	Ala	Lys	Asn	Ile												
	450					455				460																	
Ile	His	Arg	Asp	Met	Lys	Ser	Asn	Asn	Ile	Phe	Leu	His	Glu	Gly	Leu												
465					470					475				480													
Thr	Val	Lys	Ile	Gly	Asp	Phe	Gly	Leu	Ala	Thr	Val	Lys	Ser	Arg	Trp												
			485					490						495													
Ser	Gly	Ser	Gln	Gln	Val	Glu	Gln	Pro	Thr	Gly	Ser	Val	Leu	Trp	Met												
		500						505					510														
Ala	Pro	Glu	Val	Ile	Arg	Met	Gln	Asp	Asn	Asn	Pro	Phe	Ser	Phe	Gln												
	515					520					525																
Ser	Asp	Val	Tyr	Ser	Tyr	Gly	Ile	Val	Leu	Tyr	Glu	Leu	Met	Thr	Gly												
	530					535					540																

<210> 4931
 <211> 261
 <212> DNA
 <213> Homo sapiens

<400> 4931
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 120
 taccggtatg cccatctctc agctgaggac tttaatatct atggccatgg gggccgccag
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 ttctggctgg tcagctcctg cttctctctc ctgctcggag gagcttctac gtgtatgcgg
 240
 gcatcctggc accgctcaac n
 261

<210> 4932
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 4932
 Ile Ile Leu Gly Leu Ala Phe Gly Xaa Leu Glu Ser Lys Ser Ser Ile
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 Lys Arg Val Leu Ala Ile Thr Thr Val Leu Ser Pro Ala Leu Ser Val
 20 25 30
 Thr Gln Gly Thr Arg Lys Ile Leu Tyr Pro Tyr Ala His Leu Ser Ala
 35 40 45
 Glu Asp Phe Asn Ile Tyr Gly His Gly Gly Arg Gln Phe Trp Leu Val
 50 55 60
 Ser Ser Cys Phe Phe Phe Leu Leu Gly Gly Ala Ser Thr Cys Met Arg
 65 70 75 80
 Ala Ser Trp His Arg Ser Thr
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<210> 4933
 <211> 975
 <212> DNA
 <213> Homo sapiens

<400> 4933
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 ccaagggctg ggcatggcgg caaccgtggg tcacctctc tcgtcttctt ccacaggtgt
 180
 gcttccccga cagctgcagc catgggggtct gaggaccacg gcgcccagaa cccagctgt
 240
 aaaatcatga cgtttcgccc aaccatggaa gaatttaaag acttcaacaa atacgtggcc
 300
 tacatagagt cgcagggagc ccaccgggag ggctgggcca agatcatccc cccgaaggag
 360

tggaagccgc ggcagacgta tgatgacatc gacgacgtgg tgatccccgc gcccatccag
 420
 cagggtggtga cgggccagtc gggcctcttc acgcagtaca atatccagaa gaaggccatg
 480
 acagtgggcg agtaccgccg cctggccaac agcgagaagt actgtacccc gcggcaccag
 540
 gactttgacg accttgaacg caaatactgg aagaacctca cctttgtctc cccgatctac
 600
 ggggctgaca tcagcggctc tttgtatgat gacgtaagta tgaggctccg gggaagaaca
 660
 gggaccagct tcctggtggg tgggtggtggg agggccctga acgggactct gccttggcag
 720
 atgaagcttc caggcaggca aggttaaccc cctcgcccag gctctggatg cgggcctcgc
 780
 cctgtggtga cgaaagagga agccaggctt tctctgattt ttgcagggcc cctcctgcct
 840
 caccctgcag cccccaccct gagctcacc tggccccacc tctggcctca gcagccggcc
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<210> 4934

<211> 181

<212> PRT

<213> Homo sapiens

<400> 4934

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Thr	Phe	Arg	Pro	Thr	Met	Glu	Glu	Phe	Lys	Asp	Phe	Asn	Lys	Tyr	Val
			20					25					30		
Ala	Tyr	Ile	Glu	Ser	Gln	Gly	Ala	His	Arg	Ala	Gly	Leu	Ala	Lys	Ile
		35					40					45			
Ile	Pro	Pro	Lys	Glu	Trp	Lys	Pro	Arg	Gln	Thr	Tyr	Asp	Asp	Ile	Asp
	50					55					60				
Asp	Val	Val	Ile	Pro	Ala	Pro	Ile	Gln	Gln	Val	Val	Thr	Gly	Gln	Ser
65					70					75				80	
Gly	Leu	Phe	Thr	Gln	Tyr	Asn	Ile	Gln	Lys	Lys	Ala	Met	Thr	Val	Gly
			85					90						95	
Glu	Tyr	Arg	Arg	Leu	Ala	Asn	Ser	Glu	Lys	Tyr	Cys	Thr	Pro	Arg	His
			100					105					110		
Gln	Asp	Phe	Asp	Asp	Leu	Glu	Arg	Lys	Tyr	Trp	Lys	Asn	Leu	Thr	Phe
		115					120					125			
Val	Ser	Pro	Ile	Tyr	Gly	Ala	Asp	Ile	Ser	Gly	Ser	Leu	Tyr	Asp	Asp
		130				135					140				
Val	Ser	Met	Arg	Leu	Arg	Gly	Arg	Thr	Gly	Thr	Ser	Phe	Leu	Val	Gly
145				150						155				160	
Gly	Gly	Gly	Arg	Ala	Leu	Asn	Gly	Thr	Leu	Pro	Trp	Gln	Met	Lys	Leu
			165					170						175	
Pro	Gly	Arg	Gln	Gly											
			180												

<210> 4935
<211> 1668
<212> DNA
<213> Homo sapiens

<400> 4935
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120
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240
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300
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360
tctccaaacg gaactctaca gacagccgcc ccgagtgtca cgtatcggtt tggttccgtg
420
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480
cccctctcaa gagcaaggac acacacaaat gtcatgaatg ccacgagtcc tctgctgga
540
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600
aacagccttc cacattcagc agtctcaaat gctggcagca aaagcagtgt catggacggg
660
gccattgctt ctggggtcag caaatttgca acactttcac tacatgaccg gaaggagagg
720
caccacgaga aagatcacia gcgaaatcat agcatgggac acatttctag caagagcagt
780
gacaaactga atctagttac caaaaccaa acggaccctg ctaaaactct gggaaacgcc
840
ctgtgtcttc gaatggaaga tgttcccttg ttagagccgc tgatatgtaa aaagatagca
900
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960
ggatttattt gcacatgggg aaggcctggt aaagtggtaa gttttaatcc ttaatgctgc
1020
accagatcta gaacttgaat aggtagtgc ttttttctt ttcgtgggag ggggtgggtg
1080
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1140
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1200
taaaaaaata taatcaaact aattgccagc caagtcagtc atcctcctgg gagtatatag
1260
agtcccaagg ttagcgtcc tgtattagac tatttcaatt ttaggaaaat catgaccatg
1320
tggggaaaca atgacttta aatgctgaaa ttaaaattta tgctttaact ggaatatttt
1380
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1440

ccatgaattg tcatttatag tccaattttt tatcttaatc ataaaatggt taggaatcta
 1500
 tgaaatttaa ctttaggaac aaaacgttta gcagggttga ttgatattat ttttacattg
 1560
 ttctggcaat ccacagaaag agaagagcct taatttttaa aaccattttt agtcatttta
 1620
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<210> 4936

<211> 337

<212> PRT

<213> Homo sapiens

<400> 4936

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			20					25					30		
Gly	Leu	Leu	Cys	Val	Cys	Trp	Ser	Pro	Asp	Gly	Lys	Tyr	Ile	Val	Thr
		35					40					45			
Gly	Gly	Glu	Asp	Asp	Leu	Val	Thr	Val	Trp	Ser	Phe	Val	Asp	Cys	Arg
		50				55					60				
Val	Ile	Ala	Arg	Gly	His	Gly	His	Lys	Ser	Trp	Val	Ser	Val	Val	Ala
65					70					75					80
Phe	Asp	Pro	Tyr	Thr	Thr	Ser	Val	Glu	Glu	Gly	Asp	Pro	Met	Glu	Phe
				85					90					95	
Ser	Gly	Ser	Asp	Glu	Asp	Phe	Gln	Asp	Leu	Leu	His	Phe	Gly	Glu	Ile
			100					105					110		
Glu	Gln	Ile	Val	His	Ser	Pro	Gly	Ser	Pro	Asn	Gly	Thr	Leu	Gln	Thr
		115					120					125			
Ala	Ala	Pro	Ser	Val	Thr	Tyr	Arg	Phe	Gly	Ser	Val	Gly	Gln	Asp	Thr
		130					135				140				
Gln	Leu	Cys	Leu	Trp	Asp	Leu	Thr	Glu	Asp	Ile	Leu	Phe	Pro	His	Gln
145					150					155					160
Pro	Leu	Ser	Arg	Ala	Arg	Thr	His	Thr	Asn	Val	Met	Asn	Ala	Thr	Ser
			165						170					175	
Pro	Pro	Ala	Gly	Ser	Asn	Gly	Asn	Ser	Val	Thr	Thr	Pro	Gly	Asn	Ser
			180					185					190		
Val	Pro	Pro	Pro	Leu	Pro	Arg	Ser	Asn	Ser	Leu	Pro	His	Ser	Ala	Val
		195					200					205			
Ser	Asn	Ala	Gly	Ser	Lys	Ser	Ser	Val	Met	Asp	Gly	Ala	Ile	Ala	Ser
		210				215					220				
Gly	Val	Ser	Lys	Phe	Ala	Thr	Leu	Ser	Leu	His	Asp	Arg	Lys	Glu	Arg
225					230					235					240
His	His	Glu	Lys	Asp	His	Lys	Arg	Asn	His	Ser	Met	Gly	His	Ile	Ser
			245						250					255	
Ser	Lys	Ser	Ser	Asp	Lys	Leu	Asn	Leu	Val	Thr	Lys	Thr	Lys	Thr	Asp
			260					265					270		
Pro	Ala	Lys	Thr	Leu	Gly	Thr	Pro	Leu	Cys	Pro	Arg	Met	Glu	Asp	Val
		275					280					285			
Pro	Leu	Leu	Glu	Pro	Leu	Ile	Cys	Lys	Lys	Ile	Ala	His	Glu	Arg	Leu
		290				295					300				
Thr	Val	Leu	Ile	Phe	Leu	Glu	Asp	Cys	Ile	Val	Thr	Ala	Cys	Gln	Glu

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<210> 4937
<211> 715
<212> DNA
<213> Homo sapiens
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<210> 4938
<211> 109
<212> PRT
<213> Homo sapiens
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<400> 4938																
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1				5				10						15		
Ser	Val	Val	Leu	Ile	Cys	Arg	Ala	Ser	Ala	Leu	Ser	Arg	Tyr	Leu	Val	
			20					25					30			
Val	Ala	Glu	Pro	Trp	Pro	Thr	Arg	Ser	Gln	Gly	Gly	Arg	Gln	Pro	Gly	
		35				40						45				
Cys	Thr	Leu	Thr	Leu	Gly	Val	Cys	Ala	Asp	Gly	Arg	Trp	Glu	Glu	Thr	
	50				55						60					
Asp	Gln	Gln	Glu	Val	Phe	Ser	Ser	Gly	Val	Ala	Ser	Pro	Thr	Leu	Asn	
65					70					75					80	
Leu	Arg	Ala	Ser	Ser	Ser	Pro	Ala	Lys	Ala	Arg	Ala	Leu	Ser	Arg	Pro	

85 90 95
 Trp Ala Leu Tyr Lys Gln Arg Glu Ala Pro Glu Leu Val
 100 105

<210> 4939
 <211> 730
 <212> DNA
 <213> Homo sapiens

<400> 4939
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 120
 tcggcctcta cccgccctcc ccaaggtcct cctccctgg actcaaaagc ctctacttgg
 180
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 240
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 300
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 360
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 420
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 480
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 540
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 600
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 ccacggccg
 730

<210> 4940
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 4940
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 20 25 30
 Ala Asp Ser Ser Ala Ser Thr Arg Pro Pro Gln Gly Pro Pro Ser Leu
 35 40 45
 Asp Ser Lys Ala Ser Thr Trp Leu Pro Leu Pro Val Thr Ser Ser Ser
 50 55 60
 Ala Glu Pro Ser Arg Pro Asn Ser Cys Pro Pro Ala Cys Ser Pro Ala
 65 70 75 80
 Ala Ala Ser Ser Phe Ser Phe Glu Ser Gln Pro Cys Pro Ser Ala Pro

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<210> 4941
<211> 1718
<212> DNA
<213> Homo sapiens
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4112

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 1260
 ttcatattcc tcagccagag cctggagtat gccagaact cacgggcctc cctccggaag
 1320
 tgctcagtca tgttcatagg gtccctgggc ccctgcatgg agagcataat gacagaagat
 1380
 cgtctgaatg aagtgaagc tgctctggat aacttgagac atgaccaga agcatcagtg
 1440
 tgcattctacg cagcccaggt ccaggaccac atcctggcca gctgctggca gaactcctgg
 1500
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 1560
 tgtgagaacc tgcccacttc ccaccagcgg cgctcctgga tcatgcaggc actgggctcc
 1620
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 1718

<210> 4942

<211> 469

<212> PRT

<213> Homo sapiens

<400> 4942

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Ile	Gln	Val	His	Tyr	His	Ile	Gly	Leu	Asn	Leu	Pro	Gly	Cys	Val	Ala
			20					25					30		
Pro	Pro	Lys	Asp	Thr	Lys	Lys	Gly	Ala	Gln	Pro	Ser	Pro	Phe	Val	Pro
		35					40					45			
Val	Arg	Trp	Val	Val	Lys	Val	Val	Lys	Thr	Leu	Leu	Leu	Arg	Met	Gly
		50				55				60					
Cys	Ser	Tyr	Glu	Thr	Thr	Phe	Leu	Glu	Asp	Gln	Gly	Gly	Trp	Glu	Leu
65				70					75					80	
Met	Glu	Gln	Val	Glu	Ser	His	His	Arg	Gly	Val	Ala	Leu	Leu	Ala	Arg
			85					90						95	
Ala	Met	Val	Gln	Tyr	Ser	Cys	Gln	Glu	Leu	Cys	Arg	Ile	Leu	Tyr	Leu
		100						105					110		
Leu	Ile	Pro	Leu	Leu	Glu	Arg	Gly	Asp	Glu	Lys	His	Arg	Ile	Thr	Ala
		115					120					125			
Thr	Ala	Phe	Phe	Val	Glu	Leu	Leu	Gln	Met	Glu	Gln	Val	Arg	Arg	Ile
		130				135				140					
Pro	Glu	Glu	Tyr	Ser	Leu	Gly	Arg	Met	Ala	Glu	Gly	Leu	Ser	His	His
145				150					155					160	
Asp	Pro	Ile	Met	Lys	Val	Leu	Ser	Ile	Arg	Gly	Leu	Val	Ile	Leu	Ala
			165					170					175		
Arg	Arg	Ser	Glu	Lys	Thr	Ala	Lys	Val	Lys	Ala	Leu	Leu	Pro	Ser	Met
		180					185						190		
Val	Lys	Gly	Leu	Lys	Asn	Met	Asp	Gly	Met	Leu	Val	Val	Glu	Ala	Val
		195				200						205			
His	Asn	Leu	Lys	Ala	Val	Phe	Lys	Gly	Arg	Asp	Gln	Lys	Leu	Met	Asp

210 215 220
 Ser Ala Val Tyr Val Glu Met Leu Gln Ile Leu Leu Pro His Phe Ser
 225 230 235 240
 Asp Ala Arg Glu Val Val Arg Ser Ser Cys Ile Asn Leu Tyr Gly Lys
 245 250 255
 Val Val Gln Lys Leu Arg Ala Pro Arg Thr Gln Ala Met Glu Glu Gln
 260 265 270
 Leu Val Ser Thr Leu Val Pro Leu Leu Leu Thr Met Gln Glu Gly Asn
 275 280 285
 Ser Lys Val Ser Gln Lys Cys Val Lys Thr Leu Leu Arg Cys Ser Tyr
 290 295 300
 Phe Met Ala Trp Glu Leu Pro Lys Arg Ala Tyr Ser Arg Lys Pro Trp
 305 310 315 320
 Asp Asn Gln Gln Gln Thr Val Ala Lys Ile Cys Lys Cys Leu Val Asn
 325 330 335
 Thr His Arg Asp Ser Ala Phe Ile Phe Leu Ser Gln Ser Leu Glu Tyr
 340 345 350
 Ala Lys Asn Ser Arg Ala Ser Leu Arg Lys Cys Ser Val Met Phe Ile
 355 360 365
 Gly Ser Leu Val Pro Cys Met Glu Ser Ile Met Thr Glu Asp Arg Leu
 370 375 380
 Asn Glu Val Lys Ala Ala Leu Asp Asn Leu Arg His Asp Pro Glu Ala
 385 390 395 400
 Ser Val Cys Ile Tyr Ala Ala Gln Val Gln Asp His Ile Leu Ala Ser
 405 410 415
 Cys Trp Gln Asn Ser Trp Leu Pro His Gly Asn Ser Trp Val Cys Tyr
 420 425 430
 Ser Ala Thr Thr His Arg Trp Ser Pro Ser Cys Glu Asn Leu Pro Thr
 435 440 445
 Ser His Gln Arg Arg Ser Trp Ile Met Gln Ala Leu Gly Ser Trp Lys
 450 455 460
 Met Ser Leu Lys Lys
 465

<210> 4943

<211> 1020

<212> DNA

<213> Homo sapiens

<400> 4943

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 120
 tagggcgaat ccacttcatt agtgaccagc tcgggcgggt cacgtgcatc acacaaataa
 180
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 240
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 300
 cagtttctct gctcatcaca cggccttcgg cactgtagct ttgggtgggt ggctgcagat
 360
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 420

tcctcccttt cagaatatgc cttccgcatg tctcgtctca gtgcccggct atttggtgaa
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 720
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 780
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 840
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 900
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<210> 4944

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4944

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Arg	Leu	Phe	Gly	Glu	Val	Thr	Arg	Pro	Thr	Asn	Ser	Lys	Ser	Met	Lys
			20					25					30		
Val	Val	Lys	Leu	Phe	Ser	Glu	Leu	Pro	Leu	Ala	Lys	Lys	Lys	Glu	Thr
		35					40					45			
Tyr	Asp	Trp	Tyr	Pro	Asn	His	His	Thr	Tyr	Ala	Glu	Leu	Met	Gln	Thr
	50					55				60					
Leu	Arg	Phe	Leu	Gly	Leu	Tyr	Arg	Asp	Glu	His	Gln	Asp	Phe	Met	Asp
65					70				75					80	
Glu	Gln	Lys	Arg	Leu	Lys	Lys	Leu	Arg	Gly	Lys	Glu	Lys	Pro	Lys	Lys
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Gly	Glu	Gly	Lys	Arg	Ala	Ala	Lys	Arg	Lys						
			100					105							

<210> 4945

<211> 1792

<212> DNA

<213> Homo sapiens

<400> 4945

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 tacaacacat atgatgtcca cttttatgct tcctttgccc tcatcatgct ctggcccaaa
 180

cttgagctca gcctacagta tgacatggct ctggccactc tcagggagga cctgacacgg
240
cgacgggtacc tgatgagtgg ggtgatggca cctgtgaaaa ggaggaacgt catcccccat
300
gatattgggg acccagatga tgaacatgg ctccgcgtca atgcatatgt aatccatgat
360
actgctgatt ggaaggacct gaacctgaag tttgtgctgc aggtttatcg ggactattac
420
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480
catgcagtgg ccagtgtgcc aggggtatgg ttggtgtctg ggaagagcct agctggttgt
540
tgcctttcct cggtaacctag gtcttcaaca tcttggtccc tctctaggct gtgatggaat
600
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660
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720
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780
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840
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900
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960
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1260
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1320
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1440
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1620
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1680
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1792

<210> 4946

<211> 197

<212> PRT

<213> Homo sapiens

<400> 4946

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Thr Ser Asn Asn Ala Pro Pro Leu Asn Leu Glu Asp Lys Leu Gln Arg
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      20           25           30
Pro Pro Gly Gln Glu Tyr Arg Met Tyr Asn Thr Tyr Asp Val His Phe
      35           40           45
Tyr Ala Ser Phe Ala Leu Ile Met Leu Trp Pro Lys Leu Glu Leu Ser
      50           55           60
Leu Gln Tyr Asp Met Ala Leu Ala Thr Leu Arg Glu Asp Leu Thr Arg
65           70           75           80
Arg Arg Tyr Leu Met Ser Gly Val Met Ala Pro Val Lys Arg Arg Asn
      85           90           95
Val Ile Pro His Asp Ile Gly Asp Pro Asp Asp Glu Pro Trp Leu Arg
      100          105          110
Val Asn Ala Tyr Leu Ile His Asp Thr Ala Asp Trp Lys Asp Leu Asn
      115          120          125
Leu Lys Phe Val Leu Gln Val Tyr Arg Asp Tyr Tyr Leu Thr Gly Asp
      130          135          140
Gln Asn Phe Leu Lys Asp Met Trp Pro Val Cys Leu Val Arg Asp Ala
145          150          155          160
His Ala Val Ala Ser Val Pro Gly Val Trp Leu Val Ser Gly Lys Ser
      165          170          175
Leu Ala Gly Cys Cys Leu Ser Ser Val Pro Arg Ser Ser Thr Ser Trp
      180          185          190
Ser Leu Ser Arg Leu
      195

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<210> 4947

<211> 2060

<212> DNA

<213> Homo sapiens

<400> 4947

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120
cacttgaata acagccctgt ggcatttttag atctcgagca ctgggatttg tcaattgtca
180
atgtgatgct tggggactgg catattcggt gcaaggggtt tttcacctt ttctgaagct
240
tcctttttcc tctgttttaa agcatatcac agtatgggcc attctctgag tgaagaaagt
300
acagagtgaa agtacacccg aagtgagagg gactcagaca tcttgtgtcc ttgctcagc
360
tggaagacta ctaagcacgt agtttcagtc attcagttga tagacatttg aacacttatg
420

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gtggtgccta accccaggcc gagtgtgact cattccacct tgcagttaaa gcagtggaaag
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540
ttactaaga gaaaacctta cagccaatcc aggacctctc tgatcacctc cccagtggat
600
gtagcattgg taaagtggaa ggaccttggt ctgtttgtca gtaggagctg atgtgtgtga
660
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720
tgcttagacc agtctagacc ctctggccct ctgcattccc agttccaaat gctagggatg
780
gagaatgtgc ttgggcttgc ataagacggg gctatgcccc tggctctcct cagctgtagt
840
cagcattgct agctgcccac aactcacgcc agtgggtgaa gatgctggtc tcagagaacc
900
agagcttggc agggccctc atacacctct tggagaggta gatgctggtc aactatgcac
960
cattacctgt gagcagagct tactcctctg ccattctctc tccaggccct cagcatcctc
1020
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1260
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1320
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1380
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1440
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1500
gaaaccacaa ggcatttgat gctaccgttc tggtcaggga ttgggctgct tcttcagttc
1560
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1620
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1680
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1740
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1920
gtgtcacatg acaccagcat gcattgcagg attattagtg tattttgagt ctgtaaaaaat
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2040

aaaaaaaaa aaaaaaaaaa
2060

<210> 4948
<211> 127
<212> PRT
<213> Homo sapiens

<400> 4948
Ala Glu Leu Thr Pro Leu Pro Phe Ser Leu Gln Ala Leu Ser Ile Leu
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Met Leu Pro His Asn Ile Pro Ser Ser Leu Ser Leu Leu Thr Ser Met
20 25 30
Val Asp Asp Met Trp His Tyr Ala Gly Asp Gln Ser Thr Asp Phe Asn
35 40 45
Trp Tyr Thr Arg Arg Ala Met Leu Ala Ala Ile Tyr Asn Thr Thr Glu
50 55 60
Leu Val Met Met Gln Asp Ser Ser Pro Asp Phe Glu Asp Thr Trp Arg
65 70 75 80
Phe Leu Glu Asn Arg Val Asn Asp Ala Met Asn Met Gly His Thr Ala
85 90 95
Lys Gln Val Lys Ser Thr Gly Glu Ala Leu Val Gln Gly Leu Met Gly
100 105 110
Ala Ala Val Thr Leu Lys Asn Leu Thr Xaa Leu Asn Gln Arg Arg
115 120 125

<210> 4949
<211> 1259
<212> DNA
<213> Homo sapiens

<400> 4949
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gacaagtta accaggggat ggtggacacc gcaaagaaga actttggcgg cggaacacg
120
gcttgggagg aaaagacgct gtccaagtac gaggccagcg agattcgctt gctggagatc
180
ctggaggggc tgtgcgagag cagcgacttc gaatgcaatc agatgctaga ggcgcaggag
240
gagcacctgg aggcctggtg gctgcagctg aagagcgaat atcctgactt attcgagtgg
300
ttttgtgtga agacactgaa agtgtgctgc tctccaggaa cctacggtcc cgactgtctc
360
gcatgccagg gcggatccca gaggccctgc agcgggaatg gccactgcag cggagatggg
420
agcagacagg gcgacgggtc ctgccggtgc cacatggggt accagggccc gctgtgcact
480
gactgcatgg acggctactt cagctcgctc cggaacgaga cccacagcat ctgcacagcc
540
tgtgacgagt cctgcaagac gtgctcgggc ctgaccaaca gagactgcgg cgagtgtgaa
600
gtgggctggg tgctggacga gggcgctgtg gtggatgtgg acgagtgtgc ggccgagccg
660

cctccctgca gcgctgcgca gttctgtaag aacgccaacg gctcctacac gtgcgaagag
 720
 tgtgactcca gctgtgtggg ctgcacaggg gaaggcccag gaaactgtaa agagtgtatc
 780
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 840
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 900
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 960
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 1020
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 1080
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 1140
 cccttaaacg gctgcatttc ttggttgctc ttaaacagac ttgtatatatt tgatacagtt
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<210> 4950

<211> 318

<212> PRT

<213> Homo sapiens

<400> 4950

Xaa Pro Ala Cys Pro Pro Gly Tyr Leu Thr Ala Pro Cys His Arg Cys
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 20 25 30
 Lys Asn Phe Gly Gly Gly Asn Thr Ala Trp Glu Glu Lys Thr Leu Ser
 35 40 45
 Lys Tyr Glu Ser Ser Glu Ile Arg Leu Leu Glu Ile Leu Glu Gly Leu
 50 55 60
 Cys Glu Ser Ser Asp Phe Glu Cys Asn Gln Met Leu Glu Ala Gln Glu
 65 70 75 80
 Glu His Leu Glu Ala Trp Trp Leu Gln Leu Lys Ser Glu Tyr Pro Asp
 85 90 95
 Leu Phe Glu Trp Phe Cys Val Lys Thr Leu Lys Val Cys Cys Ser Pro
 100 105 110
 Gly Thr Tyr Gly Pro Asp Cys Leu Ala Cys Gln Gly Gly Ser Gln Arg
 115 120 125
 Pro Cys Ser Gly Asn Gly His Cys Ser Gly Asp Gly Ser Arg Gln Gly
 130 135 140
 Asp Gly Ser Cys Arg Cys His Met Gly Tyr Gln Gly Pro Leu Cys Thr
 145 150 155 160
 Asp Cys Met Asp Gly Tyr Phe Ser Ser Leu Arg Asn Glu Thr His Ser
 165 170 175
 Ile Cys Thr Ala Cys Asp Glu Ser Cys Lys Thr Cys Ser Gly Leu Thr
 180 185 190
 Asn Arg Asp Cys Gly Glu Cys Glu Val Gly Trp Val Leu Asp Glu Gly
 195 200 205
 Ala Cys Val Asp Val Asp Glu Cys Ala Ala Glu Pro Pro Pro Cys Ser

210	215	220
Ala Ala Gln Phe Cys Lys Asn Ala Asn Gly Ser Tyr Thr Cys Glu Glu		
225	230	235
Cys Asp Ser Ser Cys Val Gly Cys Thr Gly Glu Gly Pro Gly Asn Cys		240
	245	250
Lys Glu Cys Ile Ser Gly Tyr Ala Arg Glu His Gly Gln Cys Ala Asp		255
	260	265
Val Asp Glu Cys Ser Leu Ala Glu Lys Thr Cys Val Arg Lys Asn Glu		270
	275	280
Asn Cys Tyr Asn Thr Pro Gly Ser Tyr Val Cys Val Cys Pro Asp Gly		285
	290	295
Phe Glu Glu Xaa Gly Arg Cys Leu Cys Ala Ala Gly Arg Gly		300
305	310	315

<210> 4951

<211> 1835

<212> DNA

<213> Homo sapiens

<400> 4951

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120
agcgacgact tccgccctcc ttagggccgt ggtcccgtag ctaccggctg cgctcgccgtg
180
ggcgacgtgc ccgcttccaa aatggcgcg cgggcggtat ctggtgcgct tggccggggcg
240
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300
ccgctgcct tccatgcttc agctgtgggg ctaaggctct cagatgagca gaagcagcag
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cctcccaact cattttctca gcagcattct gagacacagg gggcagaaaa acctgatcca
420
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480
gaaagtgagg agcagttgca gcaccgcatc ctgacggcag cccttgagtt tgtgcccgcc
540
cacgggtgga cagcagaggc gattgcagaa ggagcccagt ctctgggtct ctccagtga
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gcagccagca tgtttggaag gatgggcagt gagctaatac tgcattttgt gaccagtg
660
aatacccggc tcacacgtgt gctagaagag gagcagaagc tggtagagtt gggccaggcg
720
gagaagagga agacagacca gttcctgagg gatgcagtgg aaaccagact gagaatgctg
780
atccataca ttgagcactg gccccgggcc ctacgcatcc tcatgctccc tcacaacatc
840
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900
cagtcactg attttaactg gtacaccgc cgagccatgc tggctgcat ctacaacaca
960
acagagctgg tgatgatgca ggactcctct ccagactttg aggacacttg gcgcttctg
1020

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gaaaaccggg ttaatgatgc aatgaacatg ggccacactg ccaagcaggt aaagtccaca
 1080
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 1140
 ctaaaccagc gtcggtgaga ggaaggggta taagctacaa tgcctagaag agaatgagcg
 1200
 gacagattga aagagctttg aaaagtataa ggtgccatcc acataacctg gtgttcacga
 1260
 gaacacacta aaggactcct gagtactac cacagccacc tggaaaccac aaggcatttg
 1320
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 1380
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 1800
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 1835

<210> 4952

<211> 318

<212> PRT

<213> Homo sapiens

<400> 4952

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 1 5 10 15
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 20 25 30
 Val Pro Arg Ala Phe His Ala Ser Ala Val Gly Leu Arg Ser Ser Asp
 35 40 45
 Glu Gln Lys Gln Gln Pro Pro Asn Ser Phe Ser Gln Gln His Ser Glu
 50 55 60
 Thr Gln Gly Ala Glu Lys Pro Asp Pro Glu Ser Ser His Ser Pro Pro
 65 70 75 80
 Arg Tyr Thr Asp Gln Gly Gly Glu Glu Glu Glu Asp Tyr Glu Ser Glu
 85 90 95
 Glu Gln Leu Gln His Arg Ile Leu Thr Ala Ala Leu Glu Phe Val Pro
 100 105 110
 Ala His Gly Trp Thr Ala Glu Ala Ile Ala Glu Gly Ala Gln Ser Leu
 115 120 125
 Gly Leu Ser Ser Ala Ala Ala Ser Met Phe Gly Arg Met Gly Ser Glu
 130 135 140
 Leu Ile Leu His Phe Val Thr Gln Cys Asn Thr Arg Leu Thr Arg Val

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145          150          155          160
Leu Glu Glu Glu Gln Lys Leu Val Gln Leu Gly Gln Ala Glu Lys Arg
          165          170          175
Lys Thr Asp Gln Phe Leu Arg Asp Ala Val Glu Thr Arg Leu Arg Met
          180          185          190
Leu Ile Pro Tyr Ile Glu His Trp Pro Arg Ala Leu Ser Ile Leu Met
          195          200          205
Leu Pro His Asn Ile Pro Ser Ser Leu Ser Leu Leu Thr Ser Met Val
          210          215          220
Asp Asp Met Trp His Tyr Ala Gly Asp Gln Ser Thr Asp Phe Asn Trp
225          230          235          240
Tyr Thr Arg Arg Ala Met Leu Ala Ala Ile Tyr Asn Thr Thr Glu Leu
          245          250          255
Val Met Met Gln Asp Ser Ser Pro Asp Phe Glu Asp Thr Trp Arg Phe
          260          265          270
Leu Glu Asn Arg Val Asn Asp Ala Met Asn Met Gly His Thr Ala Lys
          275          280          285
Gln Val Lys Ser Thr Gly Glu Ala Leu Val Gln Gly Leu Met Gly Ala
          290          295          300
Ala Val Thr Leu Lys Asn Leu Thr Gly Leu Asn Gln Arg Arg
305          310          315

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<210> 4953
<211> 355
<212> DNA
<213> Homo sapiens

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<400> 4953
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120
ggtgccccct ggtggcagct tgaaggaagg acgggcagtg ggtcgcagcc agcggggacc
180
taccgcgcaa aacgcacata aaagctggaa tcagcttggt acagctgcag gtccctctcg
240
tccgatttgg atagaccctc ttgggaccca ctgcaccagg gaaccccaaa tgcagctcag
300
cagcatggga ggagccctgt ctgctggggg tgtctgggat cgtcggagag aggct
355

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<210> 4954
<211> 114
<212> PRT
<213> Homo sapiens

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<400> 4954
Met Ala Gly Gly Arg Gln Asp Arg Arg Ala Gln Ala Trp Thr Pro Leu
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Ser Ala Trp Gly Cys Leu Ala Ala Ser Pro Val Leu Gly Ala Gly Ile
          20          25          30
Thr Trp Pro Arg Val Pro Pro Gly Ser Leu Lys Glu Gly Arg Ala
          35          40          45
Val Gly Arg Ser Gln Arg Gly Pro Thr Pro Gln Asn Ala His Lys Ser

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50 55 60
 Trp Asn Gln Leu Val Thr Ala Ala Gly Pro Ser Arg Pro Ile Trp Ile
 65 70 75 80
 Asp Pro Leu Gly Thr His Cys Thr Arg Glu Pro Gln Met Gln Leu Ser
 85 90 95
 Ser Met Gly Gly Ala Leu Ser Ala Gly Gly Val Trp Asp Arg Arg Arg
 100 105 110
 Glu Ala

<210> 4955
 <211> 364
 <212> DNA
 <213> Homo sapiens

<400> 4955
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 60
 aactgcaaga caggggtggcc ggggacacca gcctccgccc ttctgtgaca taaggacaag
 120
 agctcagcct gcccggaac aactctgggc aagagatgtg gaaagaaaga gctcangggg
 180
 gggcacgcat ggcacctgg ggggacatct gagggcaccc ccaccacta ttcctccctc
 240
 caaggtggcc tctgagtgtg aaggcagggg gaagcagaca cctgcccctc actctccctc
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 360
 gggg
 364

<210> 4956
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 4956
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 Gln Gly Gly Arg Gly His Gln Pro Pro Pro Phe Cys Asp Ile Arg Thr
 20 25 30
 Arg Ala Gln Pro Ala Gln Glu Gln Leu Trp Ala Arg Asp Val Glu Arg
 35 40 45
 Lys Ser Ser Xaa Gly Gly Thr His Gly Ile Leu Gly Gly His Leu Arg
 50 55 60
 Ala Pro Pro Pro Thr Ile Pro Pro Ser Lys Val Ala Ser Glu Cys Glu
 65 70 75 80
 Gly Arg Gly Lys Gln Thr Pro Ala Pro His Ser Pro Ser Leu Pro His
 85 90 95
 Ser Tyr Arg Val Gly Gly Val Pro Gly Met Ile Pro Glu Gly Arg Ile
 100 105 110
 Gln Gly

<210> 4957
 <211> 872
 <212> DNA
 <213> Homo sapiens

<400> 4957
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 120
 tcttgacaag actgtacagg gcttctcatc atacacaaac cctccacagc ccacggctcc
 180
 aaccacagc acctcctgca gtccctggagg gaaaaggagc agtaacatga agtgtctgaa
 240
 gatccatttc acctcttttc catgtgaatc atgacgcttt caatgcattt cttgacagga
 300
 ttctattttg aaagaatgat gctcaatctg taccttttat gcttcttggt tcttctccat
 360
 caataatag tcagtcaact gcttgtcaga gacacttagc tgetgacagg tcctcataac
 420
 ctgactcagg taaactgcc aagatgctt gcacaggatg ctgtcactct tccgtagcac
 480
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 540
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 600
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 660
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 720
 ccgcatctc gctcaggagc tctccacaa ccgcccggca ctacggccat cgcgccgcag
 780
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 840
 gatcctgacc cccgcgcgcg ctggtccga at
 872

<210> 4958
 <211> 51
 <212> PRT
 <213> Homo sapiens

<400> 4958
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<210> 4959
 <211> 449

<212> DNA

<213> Homo sapiens

<400> 4959

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<210> 4960

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<212> PRT

<213> Homo sapiens

<400> 4960

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			20				25						30		
Ile	Trp	Arg	Ile	Arg	Cys	Phe	Ser	Pro	Ile	Ser	Gln	Gly	Trp	Lys	Leu
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	50					55					60				
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<210> 4961

<211> 4737

<212> DNA

<213> Homo sapiens

<400> 4961

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<210> 4962

<211> 1069

<212> PRT

<213> Homo sapiens

<400> 4962

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Glu Lys Arg Asp Ser Arg Asn Met Glu Val Gln Val Thr Gln Glu Met
50           55           60
Arg Asn Val Ser Ile Gly Met Gly Ser Ser Asp Glu Trp Ser Asp Val
65           70           75           80
Gln Asp Ile Ile Asp Ser Thr Pro Glu Leu Asp Met Cys Pro Glu Thr
85           90           95
Arg Leu Asp Arg Thr Gly Ser Ser Pro Thr Gln Gly Ile Val Asn Lys
100          105          110
Ala Phe Gly Ile Asn Thr Asp Ser Leu Tyr His Glu Leu Ser Thr Ala
115          120          125
Gly Ser Glu Val Ile Gly Asp Val Asp Glu Gly Ala Asp Leu Leu Gly
130          135          140
Glu Phe Ser Gly Met Gly Lys Glu Val Gly Asn Leu Leu Leu Glu Asn
145          150          155          160
Ser Gln Leu Leu Glu Thr Lys Asn Ala Leu Asn Val Val Lys Asn Asp
165          170          175
Leu Ile Ala Lys Val Asp Gln Leu Ser Gly Glu Gln Glu Val Leu Arg
180          185          190
Gly Glu Leu Glu Ala Ala Lys Gln Ala Lys Val Lys Leu Glu Asn Arg
195          200          205
Ile Lys Glu Leu Glu Glu Glu Leu Lys Arg Val Lys Ser Glu Ala Ile
210          215          220
Ile Ala Arg Arg Glu Pro Lys Glu Glu Ala Glu Asp Val Ser Ser Tyr
225          230          235          240
Leu Cys Thr Glu Ser Asp Lys Ile Pro Met Ala Gln Arg Arg Arg Phe
245          250          255
Thr Arg Val Glu Met Ala Arg Val Leu Met Glu Arg Asn Gln Tyr Lys
260          265          270
Glu Arg Leu Met Glu Leu Gln Glu Ala Val Arg Trp Thr Glu Met Ile
275          280          285
Arg Ala Ser Arg Glu His Pro Ser Val Gln Glu Lys Lys Lys Ser Thr
290          295          300
Ile Trp Gln Phe Phe Ser Arg Leu Phe Ser Ser Ser Ser Ser Pro Pro
305          310          315          320
Pro Ala Lys Arg Pro Tyr Pro Ser Val Asn Ile His Tyr Lys Ser Pro
325          330          335
Thr Thr Ala Gly Phe Ser Gln Arg Arg Asn His Ala Met Cys Pro Ile
340          345          350
Ser Ala Gly Ser Arg Pro Leu Glu Phe Phe Pro Asp Asp Asp Cys Thr
355          360          365
Ser Ser Ala Arg Arg Glu Gln Lys Arg Glu Gln Tyr Arg Gln Val Arg
370          375          380
Glu His Val Arg Asn Asp Asp Gly Arg Leu Gln Ala Cys Gly Trp Ser
385          390          395          400
Leu Pro Ala Lys Tyr Lys Gln Leu Ser Pro Asn Gly Gly Gln Glu Asp
405          410          415
Thr Arg Met Lys Asn Val Pro Val Pro Val Tyr Cys Arg Pro Leu Val
420          425          430
Glu Lys Asp Pro Thr Met Lys Leu Trp Cys Ala Ala Gly Val Asn Leu

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Pro Lys Ser Ala His Ala Ser Pro Glu Lys Lys Lys Ala Lys Glu Leu
      485              490              495
Pro Glu Met Asp Ala Thr Ser Ser Arg Val Trp Ile Leu Thr Ser Thr
      500              505              510
Leu Thr Thr Ser Lys Val Val Ile Ile Asp Ala Asn Gln Pro Gly Thr
      515              520              525
Val Val Asp Gln Phe Thr Val Cys Asn Ala His Val Leu Cys Ile Ser
      530              535              540
Ser Ile Pro Ala Ala Ser Asp Ser Asp Tyr Pro Pro Gly Glu Met Phe
  545              550              555              560
Leu Asp Ser Asp Val Asn Pro Glu Asp Pro Gly Ala Asp Gly Val Leu
      565              570              575
Ala Gly Ile Thr Leu Val Gly Cys Ala Thr Arg Cys Asn Val Pro Arg
      580              585              590
Ser Asn Cys Ser Ser Arg Gly Asp Thr Pro Val Leu Asp Lys Gly Gln
      595              600              605
Gly Glu Val Ala Thr Ile Ala Asn Gly Lys Val Asn Pro Ser Gln Ser
      610              615              620
Thr Glu Glu Ala Thr Glu Ala Thr Glu Val Pro Asp Pro Gly Pro Ser
  625              630              635              640
Glu Pro Glu Thr Ala Thr Leu Arg Pro Gly Pro Leu Thr Glu His Val
      645              650              655
Phe Thr Asp Pro Ala Pro Thr Pro Ser Ser Gly Pro Gln Pro Gly Ser
      660              665              670
Glu Asn Gly Pro Glu Pro Asp Ser Ser Ser Thr Arg Pro Glu Pro Glu
      675              680              685
Pro Ser Gly Asp Pro Thr Gly Ala Gly Ser Ser Ala Ala Pro Thr Met
      690              695              700
Trp Leu Gly Ala Gln Asn Gly Trp Leu Tyr Val His Ser Ala Val Ala
  705              710              715              720
Asn Trp Lys Lys Cys Leu His Ser Ile Lys Leu Lys Asp Ser Val Leu
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Ser Leu Val His Val Lys Gly Arg Val Leu Val Ala Leu Ala Asp Gly
      740              745              750
Thr Leu Ala Ile Phe His Arg Gly Glu Asp Gly Gln Trp Asp Leu Ser
      755              760              765
Asn Tyr His Leu Met Asp Leu Gly His Pro His His Ser Ile Arg Cys
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Met Ala Val Val Tyr Asp Arg Val Trp Cys Gly Tyr Lys Asn Lys Val
  785              790              795              800
His Val Ile Gln Pro Lys Thr Met Gln Ile Glu Lys Ser Phe Asp Ala
      805              810              815
His Pro Arg Arg Glu Ser Gln Val Arg Gln Leu Ala Trp Ile Gly Asp
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Gly Val Trp Val Ser Ile Arg Leu Asp Ser Thr Leu Arg Leu Tyr His
      835              840              845
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<212> DNA
<213> Homo sapiens
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<210> 4964

<211> 304

<212> PRT

<213> Homo sapiens

<400> 4964

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		20					25						30		
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Pro	Asn	Tyr	Val	Gln	Asp	Lys	Tyr	Leu	Leu	Gln	Leu	Leu	Arg	Asn	Ala
			85					90					95		
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      165      170      175
Phe Leu Lys Ser Asp Ser Leu Cys Leu Met Glu Gly Arg Arg Phe Arg
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Ala Gln Pro Thr Leu Pro Ser Ala His Leu Leu Ala Met His Ile Gln
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Gln Leu Glu Thr Gly Gly Phe Thr Met Thr Asn Gly Ala His Arg Trp
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Ser Lys Leu Arg Asn Ile Ala Lys Val Val Ser Gln Val His Ala Phe
225      230      235
Gln Glu Asn Pro Tyr Thr Phe Ser Pro Asp Pro Lys Leu Gln Ser Tyr
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Leu Lys Gln Arg Ile Ala Arg Phe Ser Gly Ala Asp Ile Ser Thr Leu
      260      265      270
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<210> 4965

<211> 1474

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<210> 4974
 <211> 215
 <212> PRT
 <213> Homo sapiens

<400> 4974
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 35 40 45
 Gly Thr Arg Ile Ile Glu Val Ser Gly Gln Lys Ile Lys Leu Gln Ile
 50 55 60
 Trp Asp Thr Ala Gly Gln Glu Arg Phe Arg Ala Val Thr Arg Ser Tyr
 65 70 75 80
 Tyr Arg Gly Ala Ala Gly Ala Leu Met Val Tyr Asp Ile Thr Arg Arg
 85 90 95
 Ser Thr Tyr Asn His Leu Ser Ser Trp Leu Thr Asp Ala Arg Asn Leu
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 Thr Asn Pro Asn Thr Val Ile Ile Leu Ile Gly Asn Lys Ala Asp Leu
 115 120 125
 Glu Ala Gln Arg Asp Val Thr Tyr Glu Glu Ala Lys Gln Phe Ala Glu
 130 135 140
 Glu Asn Gly Leu Leu Phe Leu Glu Ala Ser Ala Lys Thr Gly Glu Asn
 145 150 155 160
 Val Glu Asp Ala Phe Leu Glu Ala Ala Lys Lys Ile Tyr Gln Asn Ile
 165 170 175
 Gln Asp Gly Ser Leu Asp Leu Asn Ala Ala Glu Ser Gly Val Gln His
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 Gln Arg Glu Gly Cys Gly Cys
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<210> 4975
 <211> 1111
 <212> DNA
 <213> Homo sapiens

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 840
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 960
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 1020
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<210> 4976

<211> 298

<212> PRT

<213> Homo sapiens

<400> 4976

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		20						25					30		
Gly	Asp	Glu	Ile	Gln	Ile	Leu	Ser	Asn	Leu	Val	Met	Glu	Glu	Leu	Leu
		35				40					45				
Pro	Thr	Leu	Gln	Thr	Asp	Leu	Leu	Pro	Lys	Met	Lys	Gly	Lys	Lys	Asn
		50			55					60					
Asp	Arg	Lys	Arg	Thr	Trp	Leu	Gly	Leu	Leu	Glu	Glu	Ala	Tyr	Thr	Leu
65					70					75				80	
Val	Gln	His	Gln	Val	Ser	Glu	Gly	Leu	Ser	Ala	Leu	Lys	Glu	Glu	Cys
			85					90					95		
Arg	Ala	Leu	Thr	Lys	Gly	Leu	Glu	Gly	Thr	Ile	Arg	Ser	Asp	Met	Asp
		100					105						110		
Gln	Ile	Val	Asn	Ser	Lys	Asn	Tyr	Leu	Ile	Gly	Lys	Ile	Lys	Ala	Met
		115				120						125			
Val	Ala	Gln	Pro	Ala	Glu	Lys	Ser	Cys	Leu	Glu	Ser	Val	Gln	Pro	Phe

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 Ser Glu Val Arg Val Leu Phe Glu Lys Glu Val Asn Glu Val Ser Gln
 165 170 175
 Asn Phe Gln Thr Thr Lys Asp Ser Val Gln Leu Lys Glu His Leu Asp
 180 185 190
 Arg Leu Met Asn Leu Pro Leu His Ser Val Lys Met Glu Pro Cys Tyr
 195 200 205
 Thr Lys Val Asn Leu Leu His Glu Arg Leu Gln Asp Leu Lys Ser Arg
 210 215 220
 Phe Arg Phe Pro His Ile Asp Leu Val Val Gln Arg Thr Gln Asn Tyr
 225 230 235 240
 Met Gln Glu Leu Met Glu Asn Ala Val Phe Thr Phe Glu Gln Leu Leu
 245 250 255
 Ser Pro His Leu Gln Gly Glu Ala Ser Lys Thr Ala Phe Ser Ile Glu
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 Ile Arg Lys Lys Ile Phe Gln Glu Ala Leu
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<210> 4977

<211> 3309

<212> DNA

<213> Homo sapiens

<400> 4977

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<210> 4978

<211> 792

<212> PRT

<213> Homo sapiens

<400> 4978

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Asp	Lys	Gly	Glu	Asn	Glu	Leu	Thr	Gly	Ser	Ala	Ser	Glu	Glu	Ser	Gln
			20					25					30		
Glu	Thr	Thr	Thr	Ser	Thr	Ile	Ile	Thr	Thr	Thr	Val	Ile	Thr	Thr	Glu
			35				40					45			
Gln	Ala	Pro	Ala	Leu	Cys	Ser	Val	Ser	Phe	Ser	Asn	Pro	Glu	Gly	Tyr
			50			55					60				
Ile	Asp	Ser	Ser	Asp	Tyr	Pro	Leu	Leu	Pro	Leu	Asn	Asn	Phe	Leu	Glu
65					70					75				80	
Cys	Thr	Tyr	Asn	Val	Thr	Val	Tyr	Thr	Gly	Tyr	Gly	Val	Glu	Leu	Gln
			85					90					95		
Val	Lys	Ser	Val	Asn	Leu	Ser	Asp	Gly	Glu	Leu	Leu	Ser	Ile	Arg	Gly
			100					105					110		
Val	Asp	Gly	Pro	Thr	Leu	Thr	Val	Leu	Ala	Asn	Gln	Thr	Leu	Leu	Val

115 120 125
 Glu Gly Gln Val Ile Arg Ser Pro Thr Asn Thr Ile Ser Val Tyr Phe
 130 135 140
 Arg Thr Phe Gln Asp Asp Gly Leu Gly Thr Phe Gln Leu His Tyr Gln
 145 150 155 160
 Ala Phe Met Leu Ser Cys Asn Phe Pro Arg Arg Pro Asp Ser Gly Asp
 165 170 175
 Val Thr Val Met Asp Leu His Ser Gly Gly Val Ala His Phe His Cys
 180 185 190
 His Leu Gly Tyr Glu Leu Gln Gly Ala Lys Met Leu Thr Cys Ile Asn
 195 200 205
 Ala Ser Lys Pro His Trp Ser Ser Gln Glu Pro Ile Cys Ser Ala Pro
 210 215 220
 Cys Gly Gly Ala Val His Asn Ala Thr Ile Gly Arg Val Leu Ser Pro
 225 230 235 240
 Ser Tyr Pro Glu Asn Thr Asn Gly Ser Gln Phe Cys Ile Trp Thr Ile
 245 250 255
 Glu Ala Pro Glu Gly Gln Lys Leu His Leu His Phe Glu Arg Leu Leu
 260 265 270
 Leu His Asp Lys Asp Arg Met Thr Val His Ser Gly Gln Thr Asn Lys
 275 280 285
 Ser Ala Leu Leu Tyr Asp Ser Leu Gln Thr Glu Ser Val Pro Phe Glu
 290 295 300
 Gly Leu Leu Ser Glu Gly Asn Thr Ile Arg Ile Glu Phe Thr Ser Asp
 305 310 315 320
 Gln Ala Arg Ala Ala Ser Thr Phe Asn Ile Arg Phe Glu Ala Phe Glu
 325 330 335
 Lys Gly His Cys Tyr Glu Pro Tyr Ile Gln Asn Gly Asn Phe Thr Thr
 340 345 350
 Ser Asp Pro Thr Tyr Asn Ile Gly Thr Ile Val Glu Phe Thr Cys Asp
 355 360 365
 Pro Gly His Ser Leu Glu Gln Gly Pro Ala Ile Ile Glu Cys Ile Asn
 370 375 380
 Val Arg Asp Pro Tyr Trp Asn Asp Thr Glu Pro Leu Cys Arg Ala Met
 385 390 395 400
 Cys Gly Gly Glu Leu Ser Ala Val Ala Gly Val Val Leu Ser Pro Asn
 405 410 415
 Trp Pro Glu Pro Tyr Val Glu Gly Glu Asp Cys Ile Trp Lys Ile His
 420 425 430
 Val Gly Glu Glu Lys Arg Ile Phe Leu Asp Ile Gln Phe Leu Asn Leu
 435 440 445
 Ser Asn Ser Asp Ile Leu Thr Ile Tyr Asp Gly Asp Glu Val Met Pro
 450 455 460
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 465 470 475 480
 Ser Ser Thr Pro Asp Leu Thr Ile Gln Phe His Ser Asp Pro Ala Gly
 485 490 495
 Leu Ile Phe Gly Lys Gly Gln Gly Phe Ile Met Asn Tyr Ile Glu Val
 500 505 510
 Ser Arg Asn Asp Ser Cys Ser Asp Leu Pro Glu Ile Gln Asn Gly Trp
 515 520 525
 Lys Thr Thr Ser His Thr Glu Leu Val Arg Gly Ala Arg Ile Thr Tyr
 530 535 540
 Gln Cys Asp Pro Gly Tyr Asp Ile Val Gly Ser Asp Thr Leu Thr Cys

545 550 555 560
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 565 570 575
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 595 600 605
 Pro Gly Phe Val Leu Glu Gly Ser Ser Leu Leu Thr Cys Tyr Ser Arg
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 Glu Thr Gly Thr Pro Ile Trp Thr Ser Arg Leu Pro His Cys Val Ser
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 Glu Glu Ser Leu Ala Cys Asp Asn Pro Gly Leu Pro Glu Asn Gly Tyr
 645 650 655
 Gln Ile Leu Tyr Lys Arg Leu Tyr Leu Pro Gly Glu Ser Leu Thr Phe
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 Met Cys Tyr Glu Gly Phe Glu Leu Met Gly Glu Val Thr Ile Arg Cys
 675 680 685
 Ile Leu Gly Gln Pro Ser His Trp Asn Gly Pro Leu Pro Val Cys Lys
 690 695 700
 Val Asn Gln Asp Ser Phe Glu His Ala Leu Glu Ala Glu Ala Ala Ala
 705 710 715 720
 Glu Thr Ser Leu Glu Gly Gly Asn Met Ala Leu Ala Ile Phe Ile Pro
 725 730 735
 Val Leu Ile Ile Ser Leu Leu Leu Gly Gly Ala Tyr Ile Tyr Ile Thr
 740 745 750
 Arg Cys Arg Tyr Tyr Ser Asn Leu Arg Leu Pro Leu Met Tyr Ser His
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<210> 4979

<211> 1865

<212> DNA

<213> Homo sapiens

<400> 4979

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<210> 4980

<211> 266

<212> PRT

<213> Homo sapiens

<400> 4980

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 Val Gly Pro Pro Phe Leu Met Asp Glu Asn Ser Trp Phe Asn Lys Cys
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 Lys Arg Val Lys Gln Lys Tyr Gln Leu Thr Leu Glu Gln Lys Gly Tyr
 65 70 75 80
 Leu Glu Glu Leu Leu Arg Leu Arg Glu Asn Gln Leu Ser Glu Ser Val
 85 90 95
 Ser Gln Asn Lys Ile Leu Leu Gln Arg Ile Glu Asp Ser Asp Leu Ala
 100 105 110
 His Lys Leu Glu Lys Glu Gln Leu Glu Tyr Ile Ile Val Glu Leu Gln
 115 120 125
 Asp Gln Leu Thr Val Leu Lys Asn Asn Asp Leu Arg Ser Arg Gln Glu
 130 135 140
 Leu Thr Ala His Leu Thr Asn Gln Trp Pro Ser Pro Gly Ala Leu Asp
 145 150 155 160
 Val Asn Ala Val Ala Leu Asp Thr Leu Leu Tyr Arg Lys His Asn Lys
 165 170 175
 Gln Trp Lys Ser Tyr Gln Ser Leu Asp Gln Leu Ser Ala Glu Val Ser
 180 185 190
 Leu Ser Gln Thr Ser Leu Asp Pro Gly Gln Ser Gln Glu Gly Asp Gly
 195 200 205
 Lys Gln Asp Thr Leu Asn Val Met Ser Glu Gly Lys Glu Asp Thr Pro
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<210> 4981

<211> 1902

<212> DNA

<213> Homo sapiens

<400> 4981

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4161

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 1500
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 1560
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<210> 4990

<211> 54

<212> PRT

<213> Homo sapiens

<400> 4990

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Lys	Lys	Arg	Phe	Gln	Gln	Ala	Thr	Pro	Gly	Ser	Ala	Pro	Val	Ser	Arg
			20					25					30		
Glu	Gln	Ala	Ser	Phe	Leu	Ala	Ser	Ser	Phe	Ser	Ser	Ser	Ala	Gly	Pro
			35				40					45			
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			50												

<210> 4991

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4991
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 120
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 300
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 420
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 480
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 720
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 780
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<210> 4992
 <211> 69
 <212> PRT
 <213> Homo sapiens

<400> 4992
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 35 40 45
 Cys Ser Thr Leu Gly Lys Asp Cys Glu Met Tyr Lys His Arg Met Asn
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 Thr Val Met Leu Gln
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<210> 4993
 <211> 837
 <212> DNA
 <213> Homo sapiens

<400> 4993

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 120
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 180
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 240
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 300
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 420
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 480
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 720
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<210> 4994

<211> 133

<212> PRT

<213> Homo sapiens

<400> 4994

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Ala	Arg	Gly	Glu	Gly	Thr	His	Ser	Glu	Glu	Glu	Gly	Phe	Ala	Met	Asp
		20						25					30		
Glu	Glu	Asp	Ser	Asp	Gly	Glu	Leu	Asn	Thr	Trp	Glu	Leu	Ser	Glu	Gly
		35				40					45				
Thr	Asn	Cys	Pro	Pro	Lys	Glu	Gln	Pro	Gly	Asp	Leu	Phe	Asn	Glu	Asp
	50				55					60					
Trp	Asp	Ser	Glu	Leu	Lys	Ala	Asp	Gln	Gly	Asn	Pro	Tyr	Asp	Ala	Asp
65				70				75						80	
Asp	Ile	Gln	Glu	Ser	Ile	Ser	Gln	Glu	Leu	Lys	Pro	Trp	Val	Cys	Cys
		85					90						95		
Ala	Pro	Gln	Gly	Asp	Met	Ile	Tyr	Asp	Pro	Ser	Trp	His	His	Pro	Pro
		100					105					110			
Pro	Leu	Ile	Pro	Tyr	Tyr	Ser	Lys	Met	Val	Phe	Glu	Thr	Gly	Gln	Phe
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<210> 4995
<211> 1595
<212> DNA
<213> Homo sapiens

<400> 4995
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240
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300
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420
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480
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<210> 4996

<211> 217

<212> PRT

<213> Homo sapiens

<400> 4996

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Asp	Val	Ser	Arg	Leu	Thr	Arg	Glu	Gly	Gly	Pro	Leu	Leu	Tyr	Glu	Gly
			20					25					30		
Ile	Ser	Leu	Thr	Met	Asn	Ser	Lys	Leu	Leu	Asn	Gly	Ser	Gln	Arg	Val
			35				40					45			
Val	Met	Asp	Gly	Val	Ile	Ser	Asp	His	Glu	Cys	Gln	Glu	Leu	Gln	Arg
	50					55				60					
Leu	Thr	Asn	Val	Ala	Ala	Thr	Ser	Gly	Asp	Gly	Tyr	Arg	Gly	Gln	Thr
65					70					75					80
Ser	Pro	His	Thr	Pro	Asn	Glu	Lys	Phe	Tyr	Gly	Val	Thr	Val	Phe	Lys
				85					90					95	
Ala	Leu	Lys	Leu	Gly	Gln	Glu	Gly	Lys	Val	Pro	Leu	Gln	Ser	Ala	His
			100					105					110		
Leu	Tyr	Tyr	Asn	Val	Thr	Glu	Lys	Val	Arg	Arg	Ile	Met	Glu	Ser	Tyr
			115				120					125			
Phe	Arg	Leu	Asp	Thr	Pro	Leu	Tyr	Phe	Ser	Tyr	Ser	His	Leu	Val	Cys
	130					135					140				
Arg	Thr	Ala	Ile	Glu	Glu	Val	Gln	Ala	Glu	Arg	Lys	Asp	Asp	Ser	His
145					150					155					160
Pro	Val	His	Val	Asp	Asn	Cys	Ile	Leu	Asn	Ala	Glu	Thr	Leu	Val	Cys
				165					170					175	
Val	Lys	Glu	Pro	Pro	Ala	Tyr	Thr	Phe	Arg	Asp	Tyr	Ser	Ala	Ile	Leu
			180					185					190		
Tyr	Leu	Asn	Gly	Asp	Phe	Asp	Gly	Gly	Asn	Phe	Tyr	Phe	Thr	Glu	Leu
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<210> 4997

<211> 1888

<212> DNA

<213> Homo sapiens

<400> 4997

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1800

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 1860
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 1888

<210> 4998

<211> 464

<212> PRT

<213> Homo sapiens

<400> 4998

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Thr	His	Gly	Thr	Leu	Gly	Ser	Gly	Arg	Ser	Ser	Asp	Lys	Gly	Pro	Ser
			20					25					30		
Trp	Ser	Ser	Arg	Ser	Leu	Gly	Ala	Arg	Cys	Arg	Asn	Ser	Ile	Ala	Ser
		35					40					45			
Cys	Pro	Glu	Glu	Gln	Pro	His	Val	Gly	Asn	Tyr	Arg	Leu	Leu	Arg	Thr
	50					55				60					
Ile	Gly	Lys	Gly	Asn	Phe	Ala	Lys	Val	Lys	Leu	Ala	Arg	His	Ile	Leu
65					70					75				80	
Thr	Gly	Arg	Glu	Val	Ala	Ile	Lys	Ile	Ile	Asp	Lys	Thr	Gln	Leu	Asn
				85					90					95	
Pro	Ser	Ser	Leu	Gln	Lys	Leu	Phe	Arg	Glu	Val	Arg	Ile	Met	Lys	Gly
			100					105					110		
Leu	Asn	His	Pro	Asn	Ile	Val	Lys	Leu	Phe	Glu	Val	Ile	Glu	Thr	Glu
	115						120					125			
Lys	Thr	Leu	Tyr	Leu	Val	Met	Glu	Tyr	Ala	Ser	Ala	Gly	Glu	Pro	Pro
	130					135					140				
Thr	Leu	Ser	Ala	Leu	Pro	Leu	Cys	His	Leu	Pro	Leu	Pro	Leu	His	Leu
145					150					155				160	
Thr	Leu	Thr	Pro	Leu	Gly	Leu	Cys	Pro	Ala	Gly	Glu	Val	Phe	Asp	Tyr
			165						170					175	
Leu	Val	Ser	His	Gly	Arg	Met	Lys	Glu	Lys	Glu	Ala	Arg	Ala	Lys	Phe
		180						185					190		
Arg	Gln	Ile	Val	Ser	Ala	Val	His	Tyr	Cys	His	Gln	Lys	Asn	Ile	Val
	195						200					205			
His	Arg	Asp	Leu	Lys	Ala	Glu	Asn	Leu	Leu	Leu	Asp	Ala	Glu	Ala	Asn
	210					215					220				
Ile	Lys	Ile	Ala	Asp	Phe	Gly	Phe	Ser	Asn	Glu	Phe	Thr	Leu	Gly	Ser
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Lys	Leu	Asp	Thr	Phe	Cys	Gly	Ser	Pro	Pro	Tyr	Ala	Ala	Pro	Glu	Leu
			245						250					255	
Phe	Gln	Gly	Lys	Lys	Tyr	Asp	Gly	Pro	Glu	Val	Asp	Ile	Trp	Ser	Leu
		260					265						270		
Gly	Val	Ile	Leu	Tyr	Thr	Leu	Val	Ser	Gly	Ser	Leu	Pro	Phe	Asp	Gly
		275					280					285			
His	Asn	Leu	Lys	Glu	Leu	Arg	Glu	Arg	Val	Leu	Lys	Gly	Lys	Tyr	Arg
	290					295					300				
Val	Pro	Phe	Tyr	Met	Ser	Thr	Asp	Cys	Glu	Ser	Ile	Leu	Arg	Arg	Phe
305				310						315				320	
Leu	Val	Leu	Asn	Pro	Ala	Lys	Arg	Cys	Thr	Leu	Glu	Gln	Ile	Met	Lys
			325						330					335	
Asp	Lys	Trp	Ile	Asn	Ile	Gly	Tyr	Glu	Gly	Glu	Glu	Leu	Lys	Pro	Tyr

340 345 350
 Thr Glu Pro Glu Glu Asp Phe Gly Asp Thr Lys Arg Ile Glu Val Met
 355 360 365
 Val Gly Met Gly Tyr Thr Arg Glu Glu Ile Lys Glu Ser Leu Thr Ser
 370 375 380
 Gln Lys Tyr Asn Glu Val Thr Ala Thr Tyr Leu Leu Leu Gly Arg Lys
 385 390 395 400
 Thr Glu Pro Asp Glu His Gly Gly Gly Gly Ala Glu Gly Gly Ala Ala
 405 410 415
 Ala Arg Pro Glu Gly Glu Leu Gln His Arg Gly Glu Trp Glu Ser Arg
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 Ala Ala Pro Leu Gln Pro His Gly Gln Gln Arg Pro Gln Pro Gln Gln
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 Gly Arg Asp Pro Arg Ala Ala Glu Gly Gln His Glu His Pro Arg Glu
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<210> 4999
 <211> 1630
 <212> DNA
 <213> Homo sapiens

<400> 4999
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<210> 5000

<211> 307

<212> PRT

<213> Homo sapiens

<400> 5000

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Val	Ser	Val	Leu	Ala	Ala	Val	Arg	Gly	Gly	Asp	Glu	Val	Arg	Arg	Val
			20					25					30		
Arg	Glu	Ser	Asn	Val	Leu	His	Glu	Lys	Ser	Lys	Gly	Lys	Thr	Arg	Glu
		35					40					45			
Gly	Ala	Glu	Asp	Lys	Met	Thr	Ser	Gly	Asp	Val	Leu	Ser	Asn	Arg	Lys
	50					55				60					
Met	Phe	Tyr	Leu	Leu	Lys	Thr	Ala	Phe	Pro	Ser	Val	Gln	Ile	Asn	Thr
65					70				75					80	
Glu	Glu	His	Val	Asp	Ala	Ala	Asp	Gln	Glu	Val	Ile	Leu	Trp	Asp	His
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<212> PRT

<213> Homo sapiens

<400> 5002

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245	250	255
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260	265	270
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275	280	285
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<212> PRT

<213> Homo sapiens

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<211> 487

<212> PRT

<213> Homo sapiens

<400> 5008

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Met	Cys	Tyr	Ile	His	Ile	Ala	Ala	Leu	Ile	Ala	Glu	Tyr	Leu	Lys	Arg
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Lys	Gly	Met	Phe	Ser	Met	Gly	Trp	Pro	Ala	Val	Leu	Ser	Ile	Thr	Pro
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Asn	Ile	Lys	Glu	Glu	Gly	Ala	Met	Lys	Glu	Asp	Ser	Gly	Met	Gln	Asp
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Thr	Pro	Tyr	Asn	Glu	Asn	Ile	Leu	Val	Glu	Gln	Leu	Tyr	Met	Cys	Val
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<211> 426

<212> DNA

<213> Homo sapiens

<400> 5009

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<212> PRT

<213> Homo sapiens

<400> 5010

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			20					25					30		
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Glu	Ser	Thr	Gly	Pro	Phe	Ile	Ser	Cys	Pro	Arg	Pro	Ser	Gln	Gly	Ala
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<212> DNA

<213> Homo sapiens

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<211> 950

<212> PRT

<213> Homo sapiens

<400> 5012

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Pro Glu Asp Lys Pro Ala Pro Lys Asn Glu Asp Glu Met Met Val Ala
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Ile Phe Glu Tyr Ile Asp Arg Leu Phe Ser Ile Val Arg Pro Arg Arg
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Leu Leu Tyr Met Ala Ile Asp Gly Val Ala Pro Arg Val Lys Met Asn
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Gln Gln Arg Ser Arg Arg Phe Arg Ala Ile Lys Glu Gly Met Glu Ala
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<212> DNA

<213> Homo sapiens

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<210> 5014

<211> 675

<212> PRT

<213> Homo sapiens

<400> 5014

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 20           25           30
Asp Pro Glu Cys Glu Ile Glu Arg Pro Glu Arg Leu Thr Ala Ala Leu
 35           40           45
Asp Arg Leu Arg Gln Arg Gly Leu Glu Gln Arg Cys Leu Arg Leu Ser
 50           55           60
Ala Arg Glu Ala Ser Glu Glu Leu Gly Leu Val His Ser Pro Glu
 65           70           75           80
Tyr Val Ser Leu Val Arg Glu Thr Gln Val Leu Gly Lys Glu Glu Leu
 85           90           95
Gln Ala Leu Ser Gly Gln Phe Asp Ala Ile Tyr Phe His Pro Ser Thr
100           105           110
Phe His Cys Ala Arg Leu Ala Ala Gly Ala Gly Leu Gln Leu Val Asp
115           120           125
Ala Val Leu Thr Gly Ala Val Gln Asn Gly Leu Ala Leu Val Arg Pro
130           135           140
Pro Gly His His Gly Gln Arg Ala Ala Ala Asn Gly Phe Cys Val Phe
145           150           155           160
Asn Asn Val Ala Ile Ala Ala Ala His Ala Lys Gln Lys His Gly Leu
165           170           175
His Arg Ile Leu Val Val Asp Trp Asp Val His His Gly Gln Gly Ile
180           185           190
Gln Tyr Leu Phe Glu Asp Asp Pro Ser Val Leu Tyr Phe Ser Trp His
195           200           205
Arg Tyr Glu His Gly Arg Phe Trp Pro Phe Leu Arg Glu Ser Asp Ala
210           215           220
Asp Ala Val Gly Arg Gly Gln Gly Leu Gly Phe Thr Val Asn Leu Pro
225           230           235           240
Trp Asn Gln Val Gly Met Gly Asn Ala Asp Tyr Val Ala Ala Phe Leu
245           250           255
His Leu Leu Leu Pro Leu Ala Phe Glu Phe Asp Pro Glu Leu Val Leu
260           265           270
Val Ser Ala Gly Phe Asp Ser Ala Ile Gly Asp Pro Glu Gly Gln Met
275           280           285
Gln Ala Thr Pro Glu Cys Phe Ala His Leu Thr Gln Leu Leu Gln Val
290           295           300
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305           310           315           320
Glu Ser Leu Ala Glu Ser Val Cys Met Thr Val Gln Thr Leu Leu Gly
325           330           335
Asp Pro Ala Pro Pro Leu Ser Gly Pro Met Ala Pro Cys Gln Arg Cys
340           345           350
Glu Gly Ser Ala Leu Glu Ser Ile Gln Ser Ala Arg Ala Ala Gln Ala
355           360           365
Pro His Trp Lys Ser Leu Gln Gln Gln Asp Val Thr Ala Val Pro Met
370           375           380
Ser Pro Ser Ser His Ser Pro Glu Gly Arg Pro Pro Pro Leu Leu Pro
385           390           395           400
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405 410 415
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 Gln Glu Ala Ser Ala Leu Arg Glu Glu Thr Glu Ala Trp Ala Arg Pro
 450 455 460
 His Glu Ser Leu Ala Arg Glu Glu Ala Leu Thr Ala Leu Gly Lys Leu
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 Leu Tyr Leu Leu Asp Gly Met Leu Asp Gly Gln Val Asn Ser Gly Ile
 485 490 495
 Ala Ala Thr Pro Ala Ser Ala Ala Ala Thr Leu Asp Val Ala Val
 500 505 510
 Arg Arg Gly Leu Ser His Gly Ala Gln Arg Leu Leu Cys Val Ala Leu
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 Gly Gln Leu Asp Arg Pro Pro Asp Leu Ala His Asp Gly Arg Ser Leu
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 Trp Leu Asn Ile Arg Gly Lys Glu Ala Ala Ala Leu Ser Met Phe His
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 Val Ser Thr Pro Leu Pro Val Met Thr Gly Gly Phe Leu Ser Cys Ile
 565 570 575
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 580 585 590
 Leu Val Ala Leu Gly Pro Gly His Gly Leu Gln Gly Pro His Ala Ala
 595 600 605
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 Leu Leu Glu Glu Val Ser Trp Ala Gly Trp Arg Cys Cys Gly Val Gly
 625 630 635 640
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 Gly Thr Ser
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<210> 5015

<211> 1360

<212> DNA

<213> Homo sapiens

<400> 5015

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 120
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 180
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 720
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<210> 5016

<211> 284

<212> PRT

<213> Homo sapiens

<400> 5016

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		20						25					30		
Ala	Ala	Ile	Phe	Val	Gly	Gly	Ser	Gln	Ala	Trp	Leu	Glu	Met	Pro	Lys
		35					40					45			
Ser	Cys	Ala	Ala	Arg	Gln	Cys	Cys	Asn	Arg	Tyr	Ser	Ser	Arg	Arg	Lys
	50					55					60				
Gln	Leu	Thr	Phe	His	Arg	Phe	Pro	Phe	Ser	Arg	Pro	Glu	Leu	Leu	Lys
65				70					75					80	
Glu	Trp	Val	Leu	Asn	Ile	Gly	Arg	Gly	Asn	Phe	Lys	Pro	Lys	Gln	His
			85					90					95		
Thr	Val	Ile	Cys	Ser	Glu	His	Phe	Arg	Pro	Glu	Cys	Phe	Ser	Ala	Phe

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<212> DNA
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 785

<210> 5018
 <211> 63
 <212> PRT
 <213> Homo sapiens

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 Pro Pro Ser Ile Ala Ala Val Ser Gln Ser His Gly Arg Arg Ser
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<210> 5019
 <211> 2766
 <212> DNA
 <213> Homo sapiens

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<210> 5020
 <211> 433
 <212> PRT
 <213> Homo sapiens

<400> 5020
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 Glu Gln His His Trp Asp Asp Arg Arg Arg Met Pro Asp Gly Gly Tyr
 35 40 45
 Pro His Gly Pro Pro Gly Pro Leu Gly Leu Leu Gly Val Arg Pro Gly
 50 55 60
 Met Pro Pro Gln Pro Gln Gly Pro Ala Pro Leu Arg Arg Pro Asp Ser
 65 70 75 80
 Ser Asp Asp Arg Tyr Val Met Thr Lys His Ala Thr Ile Tyr Pro Thr
 85 90 95
 Glu Glu Glu Leu Gln Ala Val Gln Lys Ile Val Ser Ile Thr Glu Arg
 100 105 110
 Ala Leu Lys Leu Val Ser Asp Ser Leu Ser Glu His Glu Lys Asn Lys
 115 120 125
 Asn Lys Glu Gly Asp Asp Lys Lys Glu Gly Gly Lys Asp Arg Ala Leu
 130 135 140
 Lys Gly Val Leu Arg Val Gly Val Phe Ala Lys Gly Leu Leu Leu Arg
 145 150 155 160
 Gly Asp Arg Asn Val Asn Leu Val Leu Leu Cys Ser Glu Lys Pro Ser
 165 170 175
 Lys Thr Leu Leu Ser Arg Ile Ala Glu Asn Leu Pro Lys Gln Leu Ala
 180 185 190
 Phe Ile Ser Pro Glu Lys Tyr Asp Ile Lys Cys Ala Val Ser Glu Ala
 195 200 205
 Ala Ile Ile Leu Asn Ser Cys Val Glu Pro Lys Met Gln Val Thr Ile
 210 215 220
 Thr Leu Thr Ser Pro Ile Ile Arg Glu Glu Asn Met Arg Glu Gly Asp
 225 230 235 240
 Val Thr Ser Gly Met Val Lys Asp Pro Pro Asp Val Leu Asp Arg Gln
 245 250 255
 Lys Cys Leu Asp Ala Leu Ala Ala Leu Arg His Ala Lys Trp Phe Gln
 260 265 270
 Ala Arg Ala Asn Gly Leu Gln Ser Cys Val Ile Ile Ile Arg Ile Leu

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                275                280                285
Arg Asp Leu Cys Gln Arg Val Pro Thr Trp Ser Asp Phe Pro Ser Trp
290                295                300
Ala Met Glu Leu Leu Val Glu Lys Ala Ile Ser Ser Ala Ser Ser Pro
305                310                315                320
Gln Ser Pro Gly Asp Ala Leu Arg Arg Val Phe Glu Cys Ile Ser Ser
325                330                335
Gly Ile Ile Leu Lys Gly Ser Pro Gly Leu Leu Asp Pro Cys Glu Lys
340                345                350
Asp Pro Phe Asp Thr Leu Ala Thr Met Thr Asp Gln Gln Arg Glu Asp
355                360                365
Ile Thr Ser Ser Ala Gln Phe Ala Leu Arg Leu Leu Ala Phe Arg Gln
370                375                380
Ile His Lys Val Leu Gly Met Asp Pro Leu Pro Gln Met Ser Gln Arg
385                390                395                400
Phe Asn Ile His Asn Asn Arg Lys Arg Arg Arg Asp Ser Asp Gly Val
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Asp Gly Phe Glu Ala Glu Gly Lys Lys Asp Lys Lys Asp Tyr Asp Asn
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Phe

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<210> 5021
 <211> 494
 <212> DNA
 <213> Homo sapiens

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494

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<210> 5022
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 <212> PRT
 <213> Homo sapiens

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<400> 5022
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      20           25           30
Asp Tyr Lys Asn Tyr Leu Ala Leu Ile Asn His Arg Pro His Val Lys
      35           40           45
Gly Asn Ser Ser Cys Tyr Gly Val Leu Pro Thr Glu Glu Pro Val Tyr
      50           55           60
Asn Trp Arg Thr Val Ile Asn Ser Ala Ala Asp Phe Tyr Phe Glu Gly
      65           70           75           80
Asn Ile His Gln Ser Leu Gln Asn Ile Thr Glu Asn Gln Leu Val Gln
      85           90           95
Pro Thr Ile Leu Gln Gln Lys Gly Gly Lys Gly Arg Lys Lys Leu Arg
      100          105          110
Leu Phe Glu Tyr Leu His Glu Ser Leu Cys Asn Pro
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<210> 5023

<211> 3482

<212> DNA

<213> Homo sapiens

<400> 5023

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960

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<211> 323

<212> PRT

<213> Homo sapiens

<400> 5024

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 Cys Pro Thr Thr Ser Gly Thr Asp Phe Pro Ser Leu Gln Ser Lys Ala
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<210> 5026
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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Val Leu Asp Pro Lys Glu Lys Gln Lys Tyr Thr Asp Met Ala Lys Glu
 50 55 60
 Tyr Lys Asp Ala Phe Met Lys Ala Asn Pro Gly Tyr Lys Trp Cys Pro
 65 70 75 80
 Thr Thr Asn Lys Pro Val Lys Ser Pro His Pro Leu Ser Ile His Glu
 85 90 95
 Arg Asn Phe Gly Pro Ser His Leu Thr Leu Gln Glu Thr Cys Gln Ala
 100 105 110
 Pro Arg Lys Gln Arg Leu Lys Lys Cys Leu Ser Leu Thr Leu Glu Trp
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 Leu Ile Leu Leu Lys Trp Glu Ala
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<210> 5027
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 <213> Homo sapiens

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<210> 5028
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 Cys Arg Cys Ser
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<210> 5029
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 <212> DNA
 <213> Homo sapiens

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<210> 5030

<211> 188

<212> PRT

<213> Homo sapiens

<400> 5030

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 Phe Leu Ser Asn Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Ser
 65 70 75 80
 Ile Pro Gln Leu Leu Val Ser Leu Trp Gly Val Glu Lys Thr Ile Ser
 85 90 95
 Tyr Ala Gly Cys Met Val Gln Leu Tyr Phe Phe Leu Thr Leu Gly Thr
 100 105 110
 Thr Glu Cys Val Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Ala Ala
 115 120 125
 Val Cys Arg Pro Leu His Tyr Thr Val Leu Met His Ser Arg Phe Cys
 130 135 140
 His Leu Leu Ala Val Ala Ser Trp Val Ser Gly Phe Thr Asn Pro Ala
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<210> 5031
 <211> 505
 <212> DNA
 <213> Homo sapiens

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<210> 5032
 <211> 158
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<400> 5032
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 35 40 45
 Met Gly Val Leu Ala Arg Glu Ala Pro His Leu Glu Lys Gln Pro Ala
 50 55 60
 Ala Gly Pro Gln Arg Val Leu Pro Gly Glu Arg Glu Glu Arg Pro Pro
 65 70 75 80
 Thr Leu Ser Ala Ser Phe Arg Thr Met Ala Glu Phe Met Asp Tyr Thr
 85 90 95
 Ser Ser Gln Cys Gly Lys Tyr Tyr Ser Ser Val Pro Glu Glu Gly Gly
 100 105 110
 Ala Thr His Val Tyr Arg Tyr His Arg Gly Glu Ser Lys Leu His Met
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<210> 5033
 <211> 2888

<212> DNA

<213> Homo sapiens

<400> 5033

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<210> 5034

<211> 550

<212> PRT

<213> Homo sapiens

<400> 5034

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 35 40 45
 Cys Val Glu Val Thr Gly Lys Phe Arg Gly Gly Val Asn Pro Phe Thr
 50 55 60
 Arg Gly Cys Cys Gly Asn Val Glu His Val Leu Cys Ser Pro Leu Ala
 65 70 75 80
 Pro Arg Tyr Val Val Glu Pro Pro Arg Leu Pro Leu Ala Val Ser Leu
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 Lys Pro Pro Phe Leu Arg Pro Glu Leu Leu Asp Arg Ala Ala Pro Leu
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 115 120 125
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 Gly Pro Pro Leu Pro Pro Lys Ile Glu Ala Gly Thr Phe Ser Ser Asp
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 Leu Gln Thr Pro Arg Pro Gly Ser Ala Glu Ser Ala Leu Ser Val Gln
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 Arg Thr Ser Pro Pro Thr Pro Ala Met Tyr Lys Phe Arg Pro Ala Phe
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 Pro Thr Gly Pro Lys Val Pro Phe Cys Gly Pro Gly Glu Gln Val Pro
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 Gly Pro Asp Ser Leu Thr Leu Gly Asp Asp Asn Ile Arg Ser Leu Asp
 210 215 220
 Phe Val Ser Glu Pro Ser Leu Asp Leu Pro Asp Tyr Gly Pro Gly Gly
 225 230 235 240
 Leu His Ala Ala Tyr Pro Pro Ser Pro Pro Leu Ser Ala Ser Asp Ala
 245 250 255
 Phe Ser Gly Ala Leu Arg Ser Leu Ser Leu Lys Ala Ser Ser Arg Arg
 260 265 270
 Gly Gly Asp His Val Ala Leu Gln Pro Leu Arg Ser Glu Gly Gly Pro
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 Pro Thr Pro His Arg Ser Ile Phe Ala Pro His Ala Leu Pro Asn Arg
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 Asn Gly Ser Leu Ser Tyr Asp Ser Leu Leu Asn Pro Gly Ser Pro Gly
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 Gly His Ala Cys Pro Ala His Pro Ala Val Gly Val Ala Gly Tyr His
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 Ser Pro Tyr Leu His Pro Gly Ala Thr Gly Asp Pro Pro Arg Pro Leu
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 Pro Arg Ser Phe Ser Pro Val Leu Gly Pro Arg Pro Arg Glu Pro Ser
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 Pro Val Arg Tyr Asp Asn Leu Ser Arg Thr Ile Met Ala Ser Ile Gln
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 Glu Arg Lys Asp Arg Glu Glu Arg Glu Arg Leu Leu Arg Ser Gln Ala
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 Asp Ser Leu Phe Gly Asp Ser Gly Val Tyr Asp Ala Pro Ser Ser Tyr
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 Ser Leu Gln Gln Ala Ser Val Leu Ser Glu Gly Pro Arg Gly Pro Ala

420 425 430
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 Gly Ala Arg Asn Pro Ala Leu Gln Thr Ser Leu Ser Ser Leu Ser Ser
 450 455 460
 Ser Val Ser Arg Ala Pro Arg Thr Ser Ser Ser Ser Leu Gln Ala Asp
 465 470 475 480
 Gln Ala Ser Ser Asn Ala Pro Gly Ala Pro Ala Gln Gln Trp Leu Thr
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 Gln Val Thr Cys Thr Pro Gly Pro Ala Leu Pro Ala Arg His Ser Pro
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 Leu Thr Ile Leu Arg Gly Pro Gln Ser Cys Arg Leu His Pro His Gly
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<210> 5035

<211> 2002

<212> DNA

<213> Homo sapiens

<400> 5035

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<210> 5036

<211> 384

<212> PRT

<213> Homo sapiens

<400> 5036

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			20					25					30		
Phe	Gly	Gln	Ala	Glu	Lys	Thr	Glu	Leu	Asp	Ala	His	Phe	Glu	Asn	Leu
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Leu	Ala	Arg	Ala	Asp	Ser	Thr	Lys	Asn	Trp	Thr	Glu	Lys	Ile	Leu	Arg
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Gln	Thr	Glu	Val	Leu	Leu	Gln	Pro	Asn	Pro	Ser	Ala	Arg	Val	Glu	Glu

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Phe	Leu	Tyr	Glu	Lys	Leu	Asp	Arg	Lys	Val	Pro	Ser	Arg	Val	Thr	Asn
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Gly	Glu	Leu	Leu	Ala	Gln	Tyr	Met	Ala	Asp	Ala	Ala	Ser	Glu	Leu	Gly
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Pro	Thr	Thr	Pro	Tyr	Gly	Lys	Thr	Leu	Ile	Lys	Val	Ala	Glu	Ala	Glu
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Lys	Gln	Leu	Gly	Ala	Ala	Glu	Arg	Asp	Phe	Ile	His	Thr	Ala	Ser	Ile
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Ser	Phe	Leu	Thr	Pro	Leu	Arg	Asn	Phe	Leu	Glu	Gly	Asp	Trp	Lys	Thr
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Ile	Ser	Lys	Glu	Ser	Arg	Leu	Leu	Gln	Asn	Arg	Arg	Leu	Asp	Leu	Asp
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Ala	Cys	Lys	Ala	Arg	Leu	Lys	Lys	Ala	Lys	Ala	Ala	Glu	Ala	Lys	Ala
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Thr	Leu	Trp	Asn	Asp	Glu	Val	Asp	Lys	Ala	Glu	Gln	Glu	Leu	Arg	Val
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Phe	Val	Lys	Ser	Gln	Thr	Thr	Tyr	Tyr	Ala	Gln	Cys	Tyr	Arg	His	Met
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Leu	Asp	Leu	Gln	Lys	Gln	Leu	Gly	Ser	Ser	Gln	Gly	Ala	Ile	Ser	Arg
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Ser	Pro	Thr	Thr	Ala	Ala	Ala	Thr	Met	Pro	Val	Val	Pro	Ser	Val	Ala
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Ser	Leu	Ala	Pro	Pro	Gly	Glu	Ala	Ser	Leu	Cys	Leu	Glu	Glu	Val	Ala
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Pro	Pro	Ala	Ser	Gly	Thr	Arg	Lys	Ala	Arg	Val	Leu	Tyr	Asp	Tyr	Glu
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Ala	Ala	Asp	Ser	Ser	Glu	Leu	Ala	Leu	Leu	Ala	Asp	Glu	Leu	Ile	Thr
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Val	Tyr	Ser	Leu	Pro	Gly	Met	Asp	Pro	Asp	Trp	Leu	Ile	Gly	Glu	Arg
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<210> 5037

<211> 2102

<212> DNA

<213> Homo sapiens

<400> 5037

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180
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 2102

<210> 5038

<211> 533

<212> PRT

<213> Homo sapiens

<400> 5038

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Ile	Cys	Lys	Gln	Ser	Met	Ser	Val	Ser	Lys	Glu	Tyr	Asn	Leu	Arg	Arg
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His	Tyr	Gln	Thr	Asn	His	Ser	Lys	His	Tyr	Asp	Gln	Tyr	Thr	Glu	Arg
	50				55					60					
Met	Arg	Asp	Glu	Lys	Leu	His	Glu	Leu	Lys	Lys	Gly	Leu	Arg	Lys	Tyr
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Leu	Leu	Gly	Ser	Ser	Asp	Thr	Glu	Cys	Pro	Glu	Gln	Lys	Gln	Val	Phe
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Ala	Asn	Pro	Ser	Pro	Thr	Gln	Lys	Ser	Pro	Val	Gln	Pro	Val	Glu	Asp
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Leu	Ala	Gly	Asn	Leu	Trp	Glu	Lys	Leu	Arg	Glu	Lys	Ile	Arg	Ser	Phe
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Val	Ala	Tyr	Ser	Ile	Ala	Ile	Asp	Glu	Ile	Thr	Asp	Ile	Asn	Asn	Thr
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Thr	Gln	Leu	Ala	Ile	Phe	Ile	Arg	Gly	Val	Asp	Glu	Asn	Phe	Asp	Val
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Ser	Glu	Glu	Leu	Leu	Asp	Thr	Val	Pro	Met	Thr	Gly	Thr	Lys	Ser	Gly
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Asn	Glu	Ile	Phe	Ser	Arg	Val	Glu	Lys	Ser	Leu	Lys	Lys	Phe	Cys	Ile
		180					185						190		
Asp	Trp	Ser	Lys	Leu	Val	Ser	Val	Ala	Ser	Thr	Gly	Thr	Pro	Ala	Met
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Val	Asp	Ala	Asn	Asn	Gly	Leu	Val	Thr	Lys	Leu	Lys	Ser	Arg	Val	Ala
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Pro	Glu	Ser	Leu	Cys	Ala	Gln	Lys	Leu	Lys	Met	Asp	His	Val	Met	Asp
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Val	Val	Val	Lys	Ser	Val	Asn	Trp	Ile	Cys	Ser	Arg	Gly	Leu	Asn	His
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Ser	Glu	Phe	Thr	Thr	Leu	Leu	Tyr	Glu	Leu	Asp	Ser	Gln	Tyr	Gly	Ser
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 Lys Tyr Asp Lys Val Gly Ile Pro Glu Phe Tyr Lys Tyr Leu Trp Gly
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 Ser Tyr Pro Lys Tyr Lys His His Cys Ala Lys Ile Leu Ser Met Phe
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 Gly Ser Thr Tyr Ile Cys Glu Gln Leu Phe Ser Ile Met Lys Leu Ser
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<210> 5039

<211> 3059

<212> DNA

<213> Homo sapiens

<400> 5039

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<210> 5040

<211> 616

<212> PRT

<213> Homo sapiens

<400> 5040

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Tyr	Leu	Gly	Ser	Gly	Gly	Trp	Arg	Phe	Ile	Arg	Val	Phe	Ile	Lys	Thr
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Ile	Arg	Arg	Asp	Ile	Phe	Gly	Gly	Leu	Val	Leu	Leu	Lys	Val	Lys	Ala
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Lys	Val	Arg	Gln	Cys	Leu	Gln	Glu	Arg	Arg	Thr	Val	Pro	Ile	Leu	Phe
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Ala	Ser	Thr	Val	Arg	Arg	His	Pro	Asp	Lys	Thr	Ala	Leu	Ile	Phe	Glu
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Gly	Thr	Asp	Thr	His	Trp	Thr	Phe	Arg	Gln	Leu	Asp	Glu	Tyr	Ser	Ser
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Ser	Val	Ala	Asn	Phe	Leu	Gln	Ala	Arg	Gly	Leu	Ala	Ser	Gly	Asp	Val

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Gly Met Ala Lys Leu Gly Val Glu Ala Ala Leu Ile Asn Thr Asn Leu		
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Arg Arg Asp Ala Leu Leu His Cys Leu Thr Thr Ser Arg Ala Arg Ala		
165	170	175
Leu Val Phe Gly Ser Glu Met Ala Ser Ala Ile Cys Glu Val His Ala		
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Ser Pro Asp Pro Ser Leu Ser Leu Phe Cys Ser Gly Ser Trp Glu Pro		
195	200	205
Gly Ala Val Pro Pro Ser Thr Glu His Leu Asp Pro Leu Leu Lys Asp		
210	215	220
Ala Pro Lys His Leu Pro Ser Cys Pro Asp Lys Gly Phe Thr Asp Lys		
225	230	235
Leu Phe Tyr Ile Tyr Thr Ser Gly Thr Thr Gly Leu Pro Lys Ala Ala		
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Ile Val Val His Ser Arg Tyr Tyr Arg Met Ala Ala Leu Val Tyr Tyr		
260	265	270
Gly Phe Arg Met Arg Pro Asn Asp Ile Val Tyr Asp Cys Leu Pro Leu		
275	280	285
Tyr His Ser Ala Gly Asn Ile Val Gly Ile Gly Gln Cys Leu Leu His		
290	295	300
Gly Met Thr Val Val Ile Arg Lys Lys Phe Ser Ala Ser Arg Phe Trp		
305	310	315
Asp Asp Cys Ile Lys Tyr Asn Cys Thr Ile Val Gln Tyr Ile Gly Glu		
325	330	335
Leu Cys Arg Tyr Leu Leu Asn Gln Pro Pro Arg Glu Ala Glu Asn Gln		
340	345	350
His Gln Val Arg Met Ala Leu Gly Asn Ala Ser Gly Ser Pro Ser Gly		
355	360	365
Pro Thr Phe Pro Ala Ala Ser Thr Tyr Pro Arg Trp Leu Ser Ser Thr		
370	375	380
Gly Pro Glu Cys Asn Cys Ser Leu Gly Asn Phe Asp Ser Gln Val Gly		
385	390	395
Ala Cys Gly Phe Asn Ser Arg Ile Leu Ser Phe Val Tyr Pro Ile Arg		
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420	425	430
Gly Val Cys Ile Pro Cys Gln Pro Gly Glu Pro Gly Gln Leu Val Gly		
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Arg Ile Ile Gln Lys Asp Pro Leu Arg Arg Phe Asp Gly Tyr Leu Asn		
450	455	460
Gln Gly Ala Asn Asn Lys Lys Ile Ala Lys Asp Val Phe Lys Lys Gly		
465	470	475
Asp Gln Ala Tyr Leu Thr Gly Asp Val Leu Val Met Asp Glu Leu Gly		
485	490	495
Tyr Leu Tyr Phe Arg Asp Arg Thr Gly Asp Thr Phe Arg Trp Lys Gly		
500	505	510
Glu Asn Val Ser Thr Thr Glu Val Glu Gly Thr Leu Ser Arg Leu Leu		
515	520	525
Asp Met Ala Asp Val Ala Val Tyr Gly Val Glu Val Pro Gly Thr Glu		
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<211> 2461
<212> DNA
<213> Homo sapiens
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<210> 5042

<211> 686

<212> PRT

<213> Homo sapiens

<400> 5042

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 50 55 60
 Ala Arg Glu Ala Ser Glu Glu Glu Leu Gly Leu Val His Ser Pro Glu
 65 70 75 80
 Tyr Val Ser Leu Val Arg Glu Thr Gln Val Leu Gly Lys Glu Glu Leu
 85 90 95
 Gln Ala Leu Ser Gly Gln Phe Asp Ala Ile Tyr Phe His Pro Ser Thr
 100 105 110
 Phe His Cys Ala Arg Leu Ala Ala Gly Ala Gly Leu Gln Leu Val Asp
 115 120 125
 Ala Val Leu Thr Gly Ala Val Gln Asn Gly Leu Ala Leu Val Arg Pro
 130 135 140
 Pro Gly His His Gly Gln Arg Ala Ala Ala Asn Gly Phe Cys Val Phe
 145 150 155 160
 Asn Asn Val Ala Ile Ala Ala Ala His Ala Lys Gln Lys His Gly Leu
 165 170 175
 His Arg Ile Leu Val Val Asp Trp Asp Val His His Gly Gln Gly Ile
 180 185 190
 Gln Tyr Leu Phe Glu Asp Asp Pro Ser Val Leu Tyr Phe Ser Trp His
 195 200 205
 Arg Tyr Glu His Gly Arg Phe Trp Pro Phe Leu Arg Glu Ser Asp Ala
 210 215 220
 Asp Ala Val Gly Arg Gly Gln Gly Leu Gly Phe Thr Val Asn Leu Pro
 225 230 235 240
 Trp Asn Gln Val Gly Met Gly Asn Ala Asp Tyr Val Ala Ala Phe Leu
 245 250 255
 His Leu Leu Leu Pro Leu Ala Phe Glu Phe Asp Pro Glu Leu Val Leu
 260 265 270
 Val Ser Ala Gly Phe Asp Ser Ala Ile Gly Asp Pro Glu Gly Gln Met
 275 280 285
 Gln Ala Thr Pro Glu Cys Phe Ala His Leu Thr Gln Leu Leu Gln Val
 290 295 300
 Leu Ala Gly Gly Arg Val Cys Ala Val Leu Glu Gly Gly Tyr His Leu
 305 310 315 320
 Glu Ser Leu Ala Glu Ser Val Cys Met Thr Val Gln Thr Leu Leu Gly
 325 330 335
 Asp Pro Ala Pro Pro Leu Ser Gly Pro Met Ala Pro Cys Gln Arg Cys
 340 345 350
 Glu Gly Ser Ala Leu Glu Ser Ile Gln Ser Ala Arg Ala Ala Gln Ala
 355 360 365
 Pro His Trp Lys Ser Leu Gln Gln Gln Asp Val Thr Ala Val Pro Met
 370 375 380
 Ser Pro Ser Ser His Ser Pro Glu Gly Arg Pro Pro Pro Leu Leu Pro
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 Gly Gly Pro Val Cys Lys Ala Ala Ala Ser Ala Pro Ser Ser Leu Leu
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 Leu Thr Thr Pro Asp Ile Thr Leu Val Leu Pro Pro Asp Val Ile Gln

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 485 490 495
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 500 505 510
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 Gly Gln Leu Asp Arg Pro Pro Asp Leu Ala His Asp Gly Arg Ser Leu
 530 535 540
 Trp Leu Asn Ile Arg Gly Lys Glu Ala Ala Ala Leu Ser Met Phe His
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 580 585 590
 Leu Val Ala Leu Gly Pro Gly His Gly Leu Gln Gly Pro His Ala Ala
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 625 630 635 640
 Val Leu Asn Gly Glu Ala Pro Pro Ser Leu Gly Pro Ser Ser Val Ala
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<210> 5043

<211> 1824

<212> DNA

<213> Homo sapiens

<400> 5043

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1824

<210> 5044

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5044

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35	40	45	
Pro Ser Ala Leu Ser Gly Gly Gln Pro Ala Asp Thr Gln Thr Arg Ala			
50	55	60	
Thr Ser Lys Ser Leu Leu Pro Val Arg Ser Lys Glu Val Asp Val Ser			
65	70	75	80
Lys Gln Leu His Ser Gly Gly Pro Glu Asn Asp Val Thr Lys Ile Thr			
85	90	95	
Lys Leu Arg Arg Glu Asn Gly Gln Met Lys Ala Thr Asp Thr Ala Thr			
100	105	110	
Arg Arg Asn Val Arg Lys Gly Tyr Lys Pro Leu Ser Lys Gln Lys Ser			
115	120	125	
Glu Glu Glu Leu Lys Asp Lys Asn Gln Leu Leu Glu Ala Val Asn Lys			
130	135	140	
Gln Leu His Gln Lys Leu Thr Glu Thr Gln Gly Glu Leu Lys Asp Leu			
145	150	155	160
Thr Gln Lys Val Glu Leu Leu Glu Lys Phe Arg Asp Asn Cys Leu Ala			
165	170	175	
Ile Leu Glu Ser Lys Gly Leu Asp Pro Ala Leu Gly Ser Glu Thr Leu			
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Ala Ser Arg Gln Glu Ser Thr Thr Asp His Met Asp Ser Met Leu Leu			
195	200	205	
Leu Glu Thr Leu Gln Glu Glu Leu Lys Leu Phe Asn Glu Thr Ala Lys			
210	215	220	
Lys Gln Met Glu Glu Leu Gln Ala Leu Lys Val Lys Leu Glu Met Lys			
225	230	235	240
Glu Glu Arg Val Arg Phe Leu Glu Gln Gln Thr Leu Cys Asn Asn Gln			
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260	265	270	

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<210> 5045

<211> 462

<212> DNA

<213> Homo sapiens

<400> 5045

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120

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<210> 5046
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 <213> Homo sapiens

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 35 40 45
 Asp Met Val Ala Cys Cys Leu Phe Ser Cys Ser Ser Lys His Tyr Pro
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<210> 5047
 <211> 3380
 <212> DNA
 <213> Homo sapiens

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<210> 5048

<211> 429

<212> PRT

<213> Homo sapiens

<400> 5048

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Pro	Ala	Tyr	Ala	Tyr	Val	Leu	Thr	Val	Asn	Glu	Arg	Gly	Asn	His	Cys
			35				40					45			
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85													90				95			
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 1920
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 1980
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 2040
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 2100
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 2160
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 2280
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 2340
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 2400
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<210> 5056

<211> 672

<212> PRT

<213> Homo sapiens

<400> 5056

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Ser	Leu	Leu	Asn	Ser	Leu	Asn	Glu	Gln	Arg	Gly	His	Gly	Leu	Phe	Cys
			20					25					30		
Asp	Val	Thr	Val	Ile	Val	Glu	Asp	Arg	Lys	Phe	Arg	Ala	His	Lys	Asn
			35				40					45			
Ile	Leu	Ser	Ala	Ser	Ser	Thr	Tyr	Phe	His	Gln	Leu	Phe	Ser	Val	Ala
			50				55				60				
Gly	Gln	Val	Val	Glu	Leu	Ser	Phe	Ile	Arg	Ala	Glu	Ile	Phe	Ala	Glu

65 70 75 80
 Ile Leu Asn Tyr Ile Tyr Ser Ser Lys Ile Val Arg Val Arg Ser Asp
 85 90 95
 Leu Leu Asp Glu Leu Ile Lys Ser Gly Gln Leu Leu Gly Val Lys Phe
 100 105 110
 Ile Ala Glu Leu Gly Val Pro Leu Ser Gln Val Lys Ser Ile Ser Gly
 115 120 125
 Thr Ala Gln Asp Gly Asn Thr Glu Pro Leu Pro Pro Asp Ser Gly Asp
 130 135 140
 Lys Asn Leu Val Ile Gln Lys Ser Lys Asp Glu Ala Gln Asp Asn Gly
 145 150 155 160
 Ala Thr Ile Met Pro Ile Ile Thr Glu Ser Phe Ser Leu Ser Ala Glu
 165 170 175
 Asp Tyr Glu Met Lys Lys Ile Ile Val Thr Asp Ser Asp Asp Asp
 180 185 190
 Asp Asp Val Ile Phe Cys Ser Glu Ile Leu Pro Thr Lys Glu Thr Leu
 195 200 205
 Pro Ser Asn Asn Thr Val Ala Gln Val Gln Ser Asn Pro Gly Pro Val
 210 215 220
 Ala Ile Ser Asp Val Ala Pro Ser Ala Ser Asn Asn Ser Pro Pro Leu
 225 230 235 240
 Thr Asn Ile Thr Pro Thr Gln Lys Leu Pro Thr Pro Val Asn Gln Ala
 245 250 255
 Thr Leu Ser Gln Thr Gln Gly Ser Glu Lys Leu Leu Val Ser Ser Ala
 260 265 270
 Pro Thr His Leu Thr Pro Asn Ile Ile Leu Leu Asn Gln Thr Pro Leu
 275 280 285
 Ser Thr Pro Pro Asn Val Ser Ser Ser Leu Pro Asn His Met Pro Ser
 290 295 300
 Ser Ile Asn Leu Leu Val Gln Asn Gln Gln Thr Pro Asn Ser Ala Ile
 305 310 315 320
 Leu Thr Gly Asn Lys Ala Asn Glu Glu Glu Glu Glu Ile Ile Asp
 325 330 335
 Asp Asp Asp Asp Thr Ile Ser Ser Ser Pro Asp Ser Ala Val Ser Asn
 340 345 350
 Thr Ser Leu Val Pro Gln Ala Asp Thr Ser Gln Asn Thr Ser Phe Asp
 355 360 365
 Gly Ser Leu Ile Gln Lys Met Gln Ile Pro Thr Leu Leu Gln Glu Pro
 370 375 380
 Leu Ser Asn Ser Leu Lys Ile Ser Asp Ile Ile Thr Arg Asn Thr Asn
 385 390 395 400
 Asp Pro Gly Val Gly Ser Lys His Leu Met Glu Gly Gln Lys Ile Ile
 405 410 415
 Thr Leu Asp Thr Ala Thr Glu Ile Glu Gly Leu Ser Thr Gly Cys Lys
 420 425 430
 Val Tyr Ala Asn Ile Gly Glu Asp Thr Tyr Asp Ile Val Ile Pro Val
 435 440 445
 Lys Asp Asp Pro Asp Glu Gly Glu Ala Arg Leu Glu Asn Glu Ile Pro
 450 455 460
 Lys Thr Ser Gly Ser Glu Met Ala Asn Lys Arg Met Lys Val Lys His
 465 470 475 480
 Asp Asp His Tyr Glu Leu Ile Val Asp Gly Arg Val Tyr Tyr Ile Cys
 485 490 495
 Ile Val Cys Lys Arg Ser Tyr Val Cys Leu Thr Ser Leu Arg Arg His

	500		505		510										
Phe	Asn	Ile	His	Ser	Trp	Glu	Lys	Lys	Tyr	Pro	Cys	Arg	Tyr	Cys	Glu
	515						520				525				
Lys	Val	Phe	Pro	Leu	Ala	Glu	Tyr	Arg	Thr	Lys	His	Glu	Ile	His	His
	530						535				540				
Thr	Gly	Glu	Arg	Arg	Tyr	Gln	Cys	Leu	Ala	Cys	Gly	Lys	Ser	Phe	Ile
545					550				555						560
Asn	Tyr	Gln	Phe	Met	Ser	Ser	His	Ile	Lys	Ser	Val	His	Ser	Gln	Asp
			565						570					575	
Pro	Ser	Gly	Asp	Ser	Lys	Leu	Tyr	Arg	Leu	His	Pro	Cys	Arg	Ser	Leu
		580						585					590		
Gln	Ile	Arg	Gln	Tyr	Ala	Tyr	His	Ser	Asp	Arg	Ser	Ser	Thr	Ile	Pro
	595						600					605			
Ala	Met	Lys	Asp	Asp	Gly	Ile	Gly	Tyr	Lys	Val	Asp	Thr	Gly	Lys	Glu
	610					615					620				
Pro	Pro	Val	Gly	Thr	Thr	Thr	Ser	Thr	Gln	Asn	Lys	Pro	Met	Thr	Trp
625					630				635						640
Glu	Asp	Ile	Phe	Ile	Gln	Gln	Glu	Asn	Asp	Ser	Ile	Phe	Lys	Gln	Asn
			645					650						655	
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<210> 5057

<211> 673

<212> DNA

<213> Homo sapiens

<400> 5057

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120
gctaccgggtt ttctagggaa ggtgcttctg gaaaagttgc tgaggtcttg tcctaagggtg
180
aattcagtat atgttttggg gaggcagaaa gctggacaga caccacaaga gcgagtggaa
240
gaagtcctta gtggcaagct ttttgacaga ttgagagatg aaaatccaga ttttagagag
300
aaaattatag caatcaacag cgaactcacc caacctaaac tggctctcag tgaagaagat
360
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420
aatgaaaatt taaggtaagt acaagtaatt atataatatt tgaacttcag tatagttatt
480
aaaaaatctc attttaattc tacttttttag tcaatttggt ttgaatgtga tttgatacta
540
tttgcctatg ttaactgtgg ctttcagtgt cctacagagt gttaaaagaa ttctcttctt
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660
tttaaacatg cat
673

<210> 5058

<211> 122
 <212> PRT
 <213> Homo sapiens

<400> 5058
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 Gly Ala Thr Gly Phe Leu Gly Lys Val Leu Leu Glu Lys Leu Leu Arg
 20 25 30
 Ser Cys Pro Lys Val Asn Ser Val Tyr Val Leu Val Arg Gln Lys Ala
 35 40 45
 Gly Gln Thr Pro Gln Glu Arg Val Glu Glu Val Leu Ser Gly Lys Leu
 50 55 60
 Phe Asp Arg Leu Arg Asp Glu Asn Pro Asp Phe Arg Glu Lys Ile Ile
 65 70 75 80
 Ala Ile Asn Ser Glu Leu Thr Gln Pro Lys Leu Ala Leu Ser Glu Glu
 85 90 95
 Asp Lys Glu Val Ile Ile Asp Ser Thr Asn Ile Ile Phe His Cys Ala
 100 105 110
 Ala Thr Val Arg Phe Asn Glu Asn Leu Arg
 115 120

<210> 5059
 <211> 480
 <212> DNA
 <213> Homo sapiens

<400> 5059
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 120
 cagctgtgag tctttctcca gggacagtcg gcagccggcc ctagggtgcag agccgatgac
 180
 aaggacccag gctctcagca ggtcttccaa gcagtgtggt agaaaggcag gcagggtgtg
 240
 gggaagtgga gccaggccac cagtcattgat gtcaagactg agccaggaag caaaggcagg
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 cagagagatg gggaggagag ggagcaggag gggactggcc atctctgaga cagaagcgtg
 360
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<210> 5060
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 5060
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 1 5 10 15
 Phe Ala Ser Trp Leu Ser Leu Asp Ile Met Thr Gly Gly Leu Ala Pro

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Leu	Pro	His	Thr	Leu	Pro	Ala	Phe	Leu	Pro	His	Cys	Leu	Glu	Asp	Leu
	35				40				45						
Leu	Arg	Ala	Trp	Val	Leu	Val	Ile	Gly	Ser	Ala	Pro	Arg	Ala	Gly	Cys
	50				55				60						
Arg	Leu	Ser	Leu	Glu	Lys	Asp	Ser	Gln	Leu	Val	Ser	Leu	Cys	Ile	His
65					70				75					80	
Ala	Leu	Cys	Pro	Glu	Arg	Pro	Ser	Gln	Ser	Ala	Arg	Ala	Val	Ile	Thr
			85					90					95		
Arg	Tyr	His	Ala	Leu	Gly	Gly	Leu	Thr	His	Arg	Glu	Cys	Leu	Ser	Val
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Leu	Glu														

<210> 5061

<211> 2462

<212> DNA

<213> Homo sapiens

<400> 5061

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120

acagtctaga agcatgccaa gacagagcat tttctgcaga ccaaagagtc ccgtcaaagt

180

gataaaggac acctggaaag tggcaggcca aggggctggg cccttcccca agggcactgc

240

atttttgtga tgagattaaa aacaaaccaa ctccactatt aaaaatgcta gaaacatgga

300

gatagtttag caccaccatt gattctggaa atatttcagc actcaaactg actgcactga

360

gtttaatgtc ctttctccag tttctctgct gaggaggaaa gaaggaaaac ctggaggaag

420

ggctcctcct gacccacag agcccactaa gagctgggag ggaattcca tgaggaattc

480

tccaaggttc tggagctcca gagacatcca ccagtcccca ccagccatg cagtccacat

540

gctcacgctt cagggattac tgaagtctgc cttgcccgga agtcacttcc tgcagacctc

600

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660

tggagataat gagttgtaaa ttcaaggagg gtggctgttt tgctgttctt tctctgcagt

720

aaactcttat ggggagtgtg ccttggttat aaggcaacgc aaaatggtag ggtatatcca

780

tgatgaatg ttcacacac ccaatcta tcataccagg tggcaggctc agcaaactga

840

accaccacag gtgtcagaga tacttgagaa tgactggtac caacaagacg acaaaggagg

900

ttgccttctt cccagatgtg cccaatggag tctgaactct ggttctaatt tgtggagggtg

960

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1020

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2462

<210> 5062

<211> 136

<212> PRT

<213> Homo sapiens

<400> 5062

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          20           25           30
Val Arg Arg Ser Pro Ser Ser Arg Phe Ser Phe Phe Pro Pro Gln Gln
          35           40           45
Arg Asn Trp Arg Lys Asp Ile Lys Leu Ser Ala Val Asp Leu Ser Ala
          50           55           60
Glu Ile Phe Pro Glu Ser Met Val Val Leu Asn Tyr Leu His Val Ser
65           70           75           80
Ser Ile Phe Asn Ser Gly Val Gly Leu Phe Leu Ile Ser Ser Gln Lys
          85           90           95
Cys Ser Ala Leu Gly Glu Gly Thr Ser Pro Leu Ala Cys His Phe Pro
          100          105          110
Gly Val Leu Tyr His Phe Asp Gly Thr Leu Trp Ser Ala Glu Asn Ala
          115          120          125
Leu Ser Trp His Ala Ser Arg Leu
          130          135

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<210> 5063

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5063

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120
tctcccttct tagagagaga gtggaagctt ctgagtgtgg cttgggtcgt tctgaaccat
180
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240
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300
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420
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561

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<210> 5064

<211> 110

<212> PRT

<213> Homo sapiens

<400> 5064

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Pro Pro Ser Tyr Val Pro Asp Thr Val Asp Leu Thr Asp Asp Ala Leu
      20           25           30
Ala Arg Lys Tyr Trp Leu Thr Cys Phe Glu Glu Ala Leu Asp Gly Val
      35           40           45
Val Lys Arg Ala Val Ala Ser Gln Pro Asp Ser Val Asp Ala Ala Glu
      50           55           60
Arg Ala Glu Lys Phe Arg Gln Lys Tyr Trp Asn Lys Leu Gln Thr Leu
65           70           75           80
Arg Gln Gln Pro Phe Ala Tyr Gly Thr Leu Thr Val Arg Ser Leu Leu
      85           90           95
Asp Thr Arg Glu His Cys Leu Asn Glu Phe Asn Phe Pro Asp
      100           105           110

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<210> 5065

<211> 370

<212> DNA

<213> Homo sapiens

<400> 5065

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cactactatg aaacgctcaa attccttggtg ggccatctca agaccatcgc tgaccactct
120
gagaaaaaca agatggaacc ccggaacctg gccctggtct ttgggccgac actggtgagg
180
acgtctgagg acaacatgac agacatggtg acccacatgc ctgaccgcta caagatcgtg
240
gagacactga tccagcactc agactggttc ttcagtgcgc aagaggacaa gggagagaga
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370

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<210> 5066

<211> 123

<212> PRT

<213> Homo sapiens

<400> 5066

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Ile Glu Asp Ala Arg Glu Arg Met Arg Thr Leu Arg Lys Leu Ile Arg
 1           5           10           15
Asp Leu Pro Gly His Tyr Tyr Glu Thr Leu Lys Phe Leu Val Gly His
      20           25           30
Leu Lys Thr Ile Ala Asp His Ser Glu Lys Asn Lys Met Glu Pro Arg
      35           40           45
Asn Leu Ala Leu Val Phe Gly Pro Thr Leu Val Arg Thr Ser Glu Asp
      50           55           60
Asn Met Thr Asp Met Val Thr His Met Pro Asp Arg Tyr Lys Ile Val
65           70           75           80
Glu Thr Leu Ile Gln His Ser Asp Trp Phe Phe Ser Asp Glu Glu Asp

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85 90 95
 Lys Gly Glu Arg Ile Leu Pro Pro Val Val Gln Ser Ser Pro Arg Val
 100 105 110
 Arg Gly Pro Pro Arg Arg Ser Arg Thr Pro Gly
 115 120

<210> 5067
 <211> 2023
 <212> DNA
 <213> Homo sapiens

<400> 5067
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 120
 cgaatacgaa gcctgttgga acgtcaagcc agagagattg aagcttttga ctctgaaagc
 180
 atgagactag gttttagtaa tatggtcctt tctaattctt cccctgaggc attcagccac
 240
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 300
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 360
 ccatggggtc acccttcagg gccaatgcaa ggggtacctc gaggtagcag tatgggagtc
 420
 cgcaatagcc cccaggctct gaggcggaca gcttctgggg gacggacaga gcagggcatg
 480
 agcagaagca cgagtgtcac ttcacaaata tccaatgggt cacacatgtc ttatacataa
 540
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 catcatcaca gcagcctcct cacttgggta ctacagtgtg gaagctgagt gcatatggta
 660
 tattttattc atttttgtaa agcgttctgt tttgggttta ctaattggga tgtcatagta
 720
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 780
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 840
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 1260

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 1800
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 1860
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 1920
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 2023

<210> 5068

<211> 179

<212> PRT

<213> Homo sapiens

<400> 5068

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Ser	Leu	Arg	Arg	Ala	Leu	Leu	Glu	Gln	Lys	Ile	Glu	Glu	Glu	Met	Leu
			20					25					30		
Ala	Leu	Gln	Asn	Glu	Arg	Thr	Glu	Arg	Ile	Arg	Ser	Leu	Leu	Glu	Arg
			35				40					45			
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<212> PRT

<213> Homo sapiens

<400> 5070

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			20					25					30		
Arg	Ser	Arg	Ser	Arg	Ser	Phe	Ser	Arg	Ser	Ser	Arg	Ser	His	Ser	Arg
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			50				55				60				
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<211> 76

<212> PRT

<213> Homo sapiens

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			20					25					30		
Ser	Leu	Gln	Ser	Ser	Trp	Asp	Tyr	Arg	His	Ala	Gln	Pro	Cys	Pro	Ala
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Asn	Phe	Cys	Asn	Phe	Ser	Arg	Asp	Gly	Phe	Ser	Leu	Ser	Arg	Asp	Gly
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<212> PRT

<213> Homo sapiens

<400> 5074

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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 5077

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<210> 5078

<211> 558

<212> PRT

<213> Homo sapiens

<400> 5078

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 Lys Lys Asn Asn Lys Arg Lys Arg Ser Lys Ser Lys Gln His Gln Gly
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 Asn Lys Asp Ala Lys Asp Lys Val Glu Arg Pro Glu Ala Gly Pro Leu
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 Gln Pro Gln Pro Pro Gln Ile Gln Asn Gly Pro Met Asn Gly Cys Glu
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 145 150 155 160
 Asp Gly Asn Pro Lys Pro Ile His Gly Thr Thr Glu Arg Ser Asp Gly
 165 170 175
 Leu Gln Trp Ser Ala Glu Gln Pro Cys Asn Pro Ser Lys Pro Lys Ala
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 Lys Thr Ser Pro Val Lys Ser Asn Thr Pro Ala Ala His Leu Glu Ile
 195 200 205
 Lys Pro Asp Glu Leu Ala Lys Lys Arg Gly Pro Asn Ile Glu Lys Ser
 210 215 220
 Val Lys Asp Leu Gln Arg Cys Thr Val Ser Leu Thr Arg Tyr Arg Val
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 Phe Ala Glu Leu His Asn Cys Ile Ile Asp Lys Glu Val Ser Leu Met

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Phe Ser Cys Asp Ile Glu Gln Leu Lys Ala Gln Ile Met Leu Cys Gly		
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Glu Ile Thr His Pro Lys Asn Asn Tyr Ser Ser Arg Thr Pro Cys Ser		
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Ser Leu Leu Pro Leu Leu Asn Ala His Ala Ala Thr Ser Gly Lys Gln		
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Ser Asn Phe Ser Arg Lys Ser Ser Thr His Asn Lys Pro Ser Glu Gly		
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Lys Ala Ala Asn Pro Lys Met Val Ser Ser Leu Pro Ser Thr Ala Asp		
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Pro Ser His Gln Thr Met Pro Ala Asn Lys Gln Asn Gly Ser Ser Asn		
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Gln Arg Arg Arg Phe Asn Pro Gln Tyr His Asn Asn Arg Leu Asn Gly		
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Pro Ala Lys Ser Gln Gly Ser Gly Asn Glu Ala Glu Pro Leu Gly Lys		
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Gly Asn Ser Arg His Glu His Arg Arg Gln Pro His Asn Gly Phe Arg		
465	470	475
Pro Lys Asn Lys Gly Gly Ala Lys Asn Gln Glu Ala Ser Leu Gly Met		
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Lys Thr Pro Glu Ala Pro Ala His Ser Glu Lys Pro Arg Arg Arg Gln		
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<210> 5079

<211> 1338

<212> DNA

<213> Homo sapiens

<400> 5079

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<210> 5080

<211> 165

<212> PRT

<213> Homo sapiens

<400> 5080

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			20					25					30		
Gly	Gly	Asp	Ser	Gly	Arg	Arg	Asn	Met	Ala	Val	Ala	Asp	Leu	Ala	Leu
		35					40					45			
Ile	Pro	Asp	Val	Asp	Ile	Asp	Ser	Asp	Gly	Val	Phe	Lys	Tyr	Val	Leu
	50					55					60				
Ile	Arg	Val	His	Ser	Ala	Pro	Arg	Ser	Gly	Ala	Pro	Ala	Ala	Glu	Ser
65					70				75					80	
Lys	Glu	Ile	Val	Arg	Gly	Tyr	Lys	Trp	Ala	Glu	Tyr	His	Ala	Asp	Ile

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Tyr Asp Lys Val Ser Gly Asp Met Gln Lys Gln Gly Cys Asp Cys Glu
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Cys Leu Gly Gly Gly Arg Ile Ser His Gln Ser Gln Asp Lys Lys Ile
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His Val Tyr Gly Tyr Ser Met Val Ser Arg Ser Pro Val Pro Pro Cys
      130      135      140
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Thr Arg Gly Pro Ser
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<210> 5081
 <211> 561
 <212> DNA
 <213> Homo sapiens

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<210> 5082
 <211> 111
 <212> PRT
 <213> Homo sapiens

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<400> 5082
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      20      25      30
Asp Ala Val Arg Met Pro Leu Gly Ala Gly Thr Pro Val Asn Val Gln
      35      40      45
Arg Arg Glu Asp Ser Ala Thr Glu Gly Ser His Arg Leu Ile Leu Ala
      50      55      60
Ala Asn Arg Asp Glu Phe Tyr Ser Arg Pro Ser Lys Leu Ala Asp Phe

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65					70					75					80
Trp	Gly	Asn	Asn	Asn	Glu	Ile	Leu	Ser	Gly	Leu	Asp	Met	Glu	Glu	Gly
				85					90					95	
Lys	Glu	Gly	Gly	Thr	Trp	Leu	Gly	Ile	Ser	Thr	Arg	Gly	Lys	Leu	
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<210> 5083

<211> 1856

<212> DNA

<213> Homo sapiens

<400> 5083

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<210> 5084

<211> 396

<212> PRT

<213> Homo sapiens

<400> 5084

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			20					25					30		
Asp	Ser	Glu	Gly	Gly	Ala	Ala	Gly	Gly	Glu	Ala	Asp	Met	Asp	Phe	Leu
		35					40					45			
Arg	Asn	Leu	Phe	Ser	Gln	Thr	Leu	Ser	Leu	Gly	Ser	Gln	Lys	Glu	Arg
	50					55					60				
Leu	Leu	Asp	Glu	Leu	Thr	Leu	Glu	Gly	Val	Ala	Arg	Tyr	Met	Gln	Ser
65					70					75				80	
Glu	Arg	Cys	Arg	Arg	Val	Ile	Cys	Leu	Val	Gly	Ala	Gly	Ile	Ser	Thr
			85						90					95	
Ser	Ala	Gly	Ile	Pro	Asp	Phe	Arg	Ser	Pro	Ser	Thr	Gly	Leu	Tyr	Asp
			100					105					110		
Asn	Leu	Glu	Lys	Tyr	His	Leu	Pro	Tyr	Pro	Glu	Ala	Ile	Phe	Glu	Ile
	115						120					125			
Ser	Tyr	Phe	Lys	Lys	His	Pro	Glu	Pro	Phe	Phe	Ala	Leu	Ala	Lys	Glu
	130					135					140				
Leu	Tyr	Pro	Gly	Gln	Phe	Lys	Pro	Thr	Ile	Cys	His	Tyr	Phe	Met	Arg
145				150						155				160	
Leu	Leu	Lys	Asp	Lys	Gly	Leu	Leu	Leu	Arg	Cys	Tyr	Thr	Gln	Asn	Ile
			165						170				175		
Asp	Thr	Leu	Glu	Arg	Ile	Ala	Gly	Leu	Glu	Gln	Glu	Asp	Leu	Val	Glu
		180						185					190		
Ala	His	Gly	Thr	Phe	Tyr	Thr	Ser	His	Cys	Val	Ser	Ala	Ser	Cys	Arg
		195					200					205			
His	Glu	Tyr	Pro	Leu	Ser	Trp	Met	Lys	Glu	Lys	Ile	Phe	Ser	Glu	Val

210 215 220
 Thr Pro Lys Cys Glu Asp Cys Gln Ser Leu Val Lys Pro Asp Ile Val
 225 230 235 240
 Phe Phe Gly Glu Ser Leu Pro Ala Arg Phe Phe Ser Cys Met Gln Ser
 245 250 255
 Asp Phe Leu Lys Val Asp Leu Leu Leu Val Met Gly Thr Ser Leu Gln
 260 265 270
 Val Gln Pro Phe Ala Ser Leu Ile Ser Lys Ala Pro Leu Ser Thr Pro
 275 280 285
 Arg Leu Leu Ile Asn Lys Glu Lys Ala Gly Gln Ser Asp Pro Phe Leu
 290 295 300
 Gly Met Ile Met Gly Leu Gly Gly Gly Met Asp Phe Asp Ser Lys Lys
 305 310 315 320
 Ala Tyr Arg Asp Val Ala Trp Leu Gly Glu Cys Asp Gln Gly Cys Leu
 325 330 335
 Ala Leu Ala Glu Leu Leu Gly Trp Lys Lys Glu Leu Glu Asp Leu Val
 340 345 350
 Arg Arg Glu His Ala Ser Ile Asp Ala Gln Ser Gly Ala Gly Val Pro
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 Asn Pro Ser Thr Ser Ala Ser Pro Lys Lys Ser Pro Pro Pro Ala Lys
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<210> 5085

<211> 2964

<212> DNA

<213> Homo sapiens

<400> 5085

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<210> 5086

<211> 792

<212> PRT

<213> Homo sapiens

<400> 5086

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			20					25					30		
His	Pro	Asp	Val	His	Ile	Met	Gln	His	His	Val	Leu	Pro	Ile	Gln	Ala
			35				40					45			
Arg	Leu	Gly	Ser	Ile	Ala	Glu	Ile	Asp	Leu	Gly	Val	Pro	Pro	Pro	Val
			50				55				60				
Met	Lys	Thr	Phe	Lys	Glu	Phe	Leu	Leu	Ser	Leu	Asp	Asp	Ser	Val	Asp
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Glu	Thr	Glu	Ala	Val	Lys	Arg	Tyr	Asn	Asp	Tyr	Lys	Leu	Asp	Phe	Arg
			85					90					95		
Arg	Gln	Gln	Met	Gln	Asp	Phe	Phe	Leu	Ala	His	Lys	Asp	Glu	Glu	Trp
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Phe	Arg	Ser	Lys	Tyr	His	Pro	Asp	Glu	Val	Gly	Lys	Arg	Arg	Gln	Glu
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Ala	Arg	Gly	Ala	Leu	Gln	Asn	Arg	Leu	Arg	Val	Phe	Leu	Ser	Leu	Met
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<212> DNA
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<212> PRT

<213> Homo sapiens

<400> 5088

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Gln	Gly	Arg	Ser	Cys	Pro	Gly	Thr	Pro	Asp	Ile	Ala	Asp	Val	Ala	Glu
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<211> 793

<212> DNA

<213> Homo sapiens

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 Val Pro Gly Phe Glu Val Ser Ala Ala Gly Leu Glu Leu Gly Leu Gly
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<212> PRT

<213> Homo sapiens

<400> 5092

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Lys Met Lys Leu Leu Pro Gln Arg Pro Leu Pro Pro Ala Leu Gln Glu
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Thr Cys Pro Val Arg Ala Glu Pro Leu Leu Leu Val Arg Ile Asn Ala
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Ser Gly Gly Leu Ile Leu Arg Met Gly Ala Ile Asn Arg Cys Leu Lys
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His Pro Leu Ala Arg Asp Thr Pro Val Cys Leu Leu Ala Val Leu Gly
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Glu Gln His Ser Gly Lys Ser Phe Leu Leu Asn His Leu Leu Gln Gly
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Leu Pro Gly Leu Glu Ser Gly Glu Gly Arg Pro Arg Gly Gly Glu
195          200          205
Ala Ser Leu Gln Gly Cys Arg Trp Gly Ala Asn Gly Leu Ala Gly Gly
210          215          220
Ile Trp Met Trp Ser His Pro Phe Leu Leu Gly Lys Glu Gly Lys Lys
225          230          235          240
Val Ala Val Phe Leu Val Asp Thr Gly Asp Ala Met Ser Pro Glu Leu
245          250          255
Ser Arg Glu Thr Arg Ile Lys Leu Cys Ala Leu Thr Thr Met Leu Ser
260          265          270
Ser Tyr Gln Ile Leu Ser Thr Ser Gln Glu Leu Lys Asp Thr Asp Leu
275          280          285
Asp Tyr Leu Glu Met Phe Val His Val Ala Glu Val Met Gly Lys His
290          295          300
Tyr Gly Met Val Pro Ile Gln His Leu Asp Leu Leu Val Arg Asp Ser
305          310          315          320
Ser His Pro Asn Lys Ala Gly Gln Gly His Val Gly Asn Ile Phe Gln
325          330          335
Arg Leu Ser Gly Arg Tyr Pro Lys Val Gln Glu Leu Leu Gln Gly Lys
340          345          350
Arg Ala Arg Cys Cys Leu Leu Pro Ala Pro Gly Arg Arg Arg Met Asn
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Gln Gly His Ala Ser Pro Gly Gly Asp Thr Asp Asp Asp Phe Arg His
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          420          425          430
Lys Asn Leu Ser Gly Trp Met Gly Arg Thr Gly Pro Gly Phe Thr Ser
          435          440          445
Pro Asp Glu Met Ala Ala Gln Leu His Asp Leu Arg Lys Val Glu Ala
          450          455          460
Ala Lys Arg Glu Phe Glu Glu Tyr Val Arg Gln Gln Asp Val Ala Thr
465          470          475          480
Lys Arg Ile Phe Ser Ala Leu Arg Val Leu Pro Asp Thr Met Arg Asn
          485          490          495
Leu Leu Ser Thr Gln Lys Asp Ala Ile Leu Ala Arg His Gly Val Ala
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Leu Leu Cys Lys Gly Arg Asp Gln Thr Leu Glu Ala Leu Glu Ala Glu
          515          520          525
Leu Gln Ala Thr Ala Lys Ala Phe Met Asp Ser Tyr Thr Met Arg Phe
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Cys Gly His Leu Ala Ala Val Gly Gly Ala Val Gly Ala Gly Leu Met
545          550          555          560
Gly Leu Ala Gly Gly Val Val Gly Ala Gly Met Ala Ala Ala Ala Leu
          565          570          575
Ala Ala Glu Ala Gly Met Val Ala Ala Gly Ala Ala Val Gly Ala Thr
          580          585          590
Gly Ala Ala Val Val Gly Gly Gly Val Gly Ala Gly Leu Ala Ala Thr
          595          600          605
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<210> 5093

<211> 1662

<212> DNA

<213> Homo sapiens

<400> 5093

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<210> 5094

<211> 365

<212> PRT

<213> Homo sapiens

<400> 5094

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			20					25					30		
Asp	Val	Val	Lys	Val	Arg	Leu	Gln	Ser	Gln	Arg	Pro	Ser	Met	Ala	Ser
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Val Leu Glu Pro Leu Tyr Leu Cys Pro Asn Gly Ala Arg Cys Ala Thr		80
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Trp Phe Gln Asp Pro Thr Arg Phe Thr Gly Thr Met Asp Ala Phe Val		95
	100	105
Lys Ile Val Arg His Glu Gly Thr Arg Thr Leu Trp Ser Gly Leu Pro		110
	115	120
Ala Thr Leu Val Met Thr Val Pro Ala Thr Ala Ile Tyr Phe Thr Ala		125
	130	135
Tyr Asp Gln Leu Lys Ala Phe Leu Cys Gly Arg Ala Leu Thr Ser Asp		140
145	150	155
Leu Tyr Ala Pro Met Val Ala Gly Ala Leu Ala Arg Leu Gly Thr Val		160
	165	170
Thr Val Ile Ser Pro Leu Glu Leu Met Arg Thr Lys Leu Gln Ala Gln		175
	180	185
His Val Ser Tyr Arg Glu Leu Gly Ala Cys Val Arg Thr Ala Val Ala		190
	195	200
Gln Gly Gly Trp Arg Ser Leu Trp Leu Gly Trp Gly Pro Thr Ala Leu		205
	210	215
Arg Asp Val Pro Phe Ser Val His Pro Pro Pro Gln Ala Leu Tyr Trp		220
225	230	235
Phe Asn Tyr Glu Leu Val Lys Ser Trp Leu Asn Gly Leu Arg Pro Lys		240
	245	250
Asp Gln Thr Ser Val Gly Met Ser Phe Val Ala Gly Gly Ile Ser Gly		255
	260	265
Thr Val Ala Ala Val Leu Thr Leu Pro Phe Asp Val Val Lys Thr Gln		270
	275	280
Arg Gln Val Ala Leu Gly Ala Met Glu Ala Val Arg Val Asn Pro Leu		285
	290	295
His Val Asp Ser Thr Trp Leu Leu Leu Arg Arg Ile Arg Ala Glu Ser		300
305	310	315
Gly Thr Lys Gly Leu Phe Ala Gly Phe Leu Pro Arg Ile Ile Lys Ala		320
	325	330
Ala Pro Ser Cys Ala Ile Met Ile Ser Thr Tyr Glu Phe Gly Lys Ser		335
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<210> 5095

<211> 2230

<212> DNA

<213> Homo sapiens

<400> 5095

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<210> 5096
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 5096
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 35 40 45
 Gln Gln His Phe Pro Val Gly Thr Ala Pro Gly Asn Pro Val Pro Ser
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 Glu Gln Gly Gly Arg Thr His Pro Ser Leu Ile Arg Ile Trp Ala Arg
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 Arg Ala Gln Gln Gly Arg Leu Leu Arg Leu Pro Thr Ser Gln His Arg
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 Leu Ser Gly Leu Asn Pro Ser Val Leu Phe Pro Ser Trp Leu Ile Gly
 100 105 110
 Arg Pro Phe Ala Gly Thr His Cys Phe Asn Leu Thr Leu Pro Pro Pro
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<210> 5097
 <211> 3074
 <212> DNA
 <213> Homo sapiens

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<210> 5098

<211> 114

<212> PRT

<213> Homo sapiens

<400> 5098

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Ser Ser Leu Gln Pro Leu Pro Pro Gly Phe Lys Gln Phe Ser Cys Leu
65                70                75                80
Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys Val Pro Pro His Pro Ala
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Asn Phe Cys Ile Phe Ser Arg Asn Gly Val Ser Pro His Trp Pro Gly
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<210> 5099

<211> 801

<212> DNA

<213> Homo sapiens

<400> 5099

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<210> 5100

<211> 102

<212> PRT

<213> Homo sapiens

<400> 5100

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<210> 5101

<211> 1711

<212> DNA

<213> Homo sapiens

<400> 5101

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<210> 5102

<211> 436

<212> PRT

<213> Homo sapiens

<400> 5102

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 35 40 45
 Gln Pro Arg Ala Leu Glu Lys His Ala Asp Ser Ile Leu Ala Leu Ala
 50 55 60
 Ser Val Phe Trp Ser Ile Ser Tyr Tyr Ser Ser Pro Phe Ala Phe Phe
 65 70 75 80
 Tyr Leu Tyr Arg Lys Gly Tyr Leu Ser Leu Ser Lys Val Val Pro Phe
 85 90 95
 Ser His Tyr Ala Gly Thr Leu Leu Leu Leu Ala Gly Val Ala Cys
 100 105 110
 Leu Arg Gly Ile Gly Arg Trp Thr Asn Pro Gln Tyr Arg Gln Phe Ile
 115 120 125
 Thr Ile Leu Glu Ala Thr His Arg Asn Gln Ser Ser Glu Asn Lys Arg
 130 135 140
 Gln Leu Ala Asn Tyr Asn Phe Asp Phe Arg Ser Trp Pro Val Asp Phe
 145 150 155 160
 His Trp Glu Glu Pro Ser Ser Arg Lys Glu Ser Arg Gly Gly Pro Ser

165										170				175			
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275										280				285			
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Pro	Asp	Val	Ser	Ala	Met	Ile	Leu	Asp	Ala	Ser	Phe	Asp	Asp	Leu	Val		
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385										390				395			
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<210> 5103

<211> 1982

<212> DNA

<213> Homo sapiens

<400> 5103

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1980

99
1982

<210> 5104
<211> 167
<212> PRT
<213> Homo sapiens

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35 40 45
Pro Ala Ala Ser Leu Lys Thr Thr Lys Asp Leu Met Ser Lys Ser Leu
50 55 60
Ser Gly Val Cys Pro Ala Ser Ser Gly Leu Leu Arg Thr Pro His Pro
65 70 75 80
Glu Gly Ala Arg Arg Pro Ala Gly Leu Ala Gly Pro Gly Ser Ser Leu
85 90 95
Thr Ala Gly Trp Thr Ala Phe Arg Thr Cys Pro Gly Cys Ser Ala Phe
100 105 110
Val Ala Gly Ser Asn Trp Arg Asn Leu Glu Arg Gly Ser Cys Ala Cys
115 120 125
Lys Asp Gly Phe Cys Val Ser Ser Gly Phe Leu Leu Ser Gly Pro Gly
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Tyr Glu Arg Ala Met Cys Phe
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<210> 5105
<211> 1359
<212> DNA
<213> Homo sapiens

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<210> 5106

<211> 178

<212> PRT

<213> Homo sapiens

<400> 5106

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Gly	Asp	Val	Ile	Cys	Tyr	Tyr	Gly	Asn	Arg	Gly	Glu	Pro	Asp	Pro	Ile
	35						40					45			
Val	Leu	Thr	Pro	Gly	Thr	Tyr	Gly	Leu	Ser	Asn	Ala	Leu	Leu	Glu	Thr
	50					55					60				
Pro	Trp	Arg	Lys	Leu	Cys	Phe	Gly	Lys	Gln	Leu	Phe	Leu	Glu	Ala	Val
65				70					75					80	
Glu	Arg	Ser	Gln	Ala	Leu	Pro	Lys	Asp	Val	Leu	Ile	Ala	Ser	Leu	Leu
			85					90					95		
Asp	Val	Leu	Asn	Asn	Glu	Glu	Ala	Gln	Leu	Pro	Asp	Pro	Ala	Ile	Glu
		100						105				110			
Asp	Gln	Gly	Gly	Glu	Tyr	Val	Gln	Pro	Met	Leu	Ser	Lys	Tyr	Ala	Ala
	115					120						125			
Val	Cys	Val	Arg	Cys	Pro	Gly	Tyr	Gly	Thr	Arg	Thr	Asn	Thr	Ile	Ile

130	135	140
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Gln Ser

<210> 5107

<211> 1207

<212> DNA

<213> Homo sapiens

<400> 5107

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<210> 5108
<211> 83
<212> PRT
<213> Homo sapiens

<400> 5108
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35 40 45
Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp Asp Tyr Arg Arg
50 55 60
Val Pro Pro Cys Pro Ala Asn Phe Cys Ile Phe Ser Arg Asp Arg Val
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<210> 5109
<211> 651
<212> DNA
<213> Homo sapiens

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<210> 5110
<211> 206
<212> PRT

<213> Homo sapiens

<400> 5110

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Gln Glu Ala Ser Asp Asn Cys Phe Met Asp Ser Asp Ile Lys Val Leu
      35           40           45
Glu Asp Gln Phe Asp Glu Ile Val Asp Ile Ala Thr Lys Arg Lys
      50           55           60
Gln Tyr Pro Arg Lys Ile Leu Glu Cys Val Ile Lys Thr Ile Lys Ala
      65           70           75           80
Lys Gln Glu Ile Leu Lys Gln Tyr His Pro Val Val His Pro Leu Asp
      85           90           95
Leu Lys Tyr Asp Pro Asp Pro Val Leu Asn Gly Asn Ala Phe Asn Phe
      100          105          110
Ser Pro Phe Asn Met Met Leu Ala Val Asp Leu Ser Tyr Met Val Phe
      115          120          125
Ile Thr Ser Ala Pro His Met Glu Asn Leu Lys Cys Arg Gly Glu Thr
      130          135          140
Val Ala Lys Glu Ile Ser Glu Ala Met Lys Ser Leu Pro Ala Leu Ile
      145          150          155          160
Glu Gln Gly Glu Gly Phe Ser Gln Val Leu Arg Met Gln Pro Val Ile
      165          170          175
His Leu Gln Arg Ile His Gln Glu Val Phe Ser Ser Cys His Arg Lys
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<210> 5111

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<212> DNA

<213> Homo sapiens

<400> 5111

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 cagagggggc aaagggcacg tcccatc
 2247

<210> 5112
 <211> 581
 <212> PRT
 <213> Homo sapiens

<400> 5112
 Ala Lys His Phe Pro Ala Gly Gly Gly Asp His Arg Glu Arg Pro Gly
 1 5 10 15
 Arg Gly Gly Lys Asp Ala Ser Val Ala His Glu Val Ala Ser Leu Ala
 20 25 30
 Leu Pro Trp Phe Ala Val Val Leu Gly Tyr Arg Glu Arg Pro Arg Val
 35 40 45
 Ser Gly Arg Pro Ser Leu Gly Ala Pro Gln Arg Leu Arg Ala Tyr Gly
 50 55 60
 Gly Arg Lys Gly Leu Glu Ala Ala Pro Trp Val Thr Thr Ala Arg Pro
 65 70 75 80
 Thr Phe Pro His Val Ala Ala Lys Thr Gly Ser Gly Ala Ser Ile Gly
 85 90 95
 Cys Thr Pro Thr Ser Thr Gln Ala Lys Met Val Ser Lys Arg Ile Ala
 100 105 110
 Gln Glu Thr Phe Asp Ala Ala Val Arg Glu Asn Ile Glu Glu Phe Ala
 115 120 125
 Met Gly Pro Glu Glu Ala Val Lys Glu Ala Val Glu Gln Phe Glu Ser
 130 135 140
 Gln Gly Val Asp Leu Ser Asn Ile Val Lys Thr Ala Pro Lys Val Ser
 145 150 155 160
 Ala Asp Gly Ser Gln Glu Pro Thr His Asp Ile Leu Gln Met Leu Ser
 165 170 175
 Asp Leu Gln Glu Ser Val Ala Ser Ser Arg Pro Gln Glu Val Ser Ala
 180 185 190
 Tyr Leu Thr Arg Phe Cys Asp Gln Cys Lys Gln Asp Lys Ala Cys Arg
 195 200 205
 Phe Leu Ala Ala Gln Lys Gly Ala Tyr Pro Ile Ile Phe Thr Ala Arg
 210 215 220
 Lys Leu Ala Thr Ala Gly Asp Gln Gly Leu Leu Leu Gln Ser Leu Asn
 225 230 235 240
 Ala Leu Ser Val Leu Thr Asp Gly Gln Pro Asp Leu Leu Asp Ala Gln
 245 250 255
 Gly Leu Gln Leu Leu Val Ala Thr Leu Thr Gln Asn Ala Asp Glu Ala
 260 265 270
 Asp Leu Thr Cys Ser Gly Ile Arg Cys Val Arg His Ala Cys Leu Lys
 275 280 285
 His Glu Gln Asn Arg Gln Asp Leu Val Lys Ala Gly Val Leu Pro Leu
 290 295 300
 Leu Thr Gly Ala Ile Thr His His Gly His His Thr Asp Val Val Arg
 305 310 315 320
 Glu Ala Cys Trp Ala Leu Arg Val Met Thr Phe Asp Asp Asp Ile Arg
 325 330 335
 Val Pro Phe Gly His Ala His Asn His Ala Lys Met Ile Val Gln Glu

340 345 350
 Asn Lys Gly Leu Lys Val Leu Ile Glu Ala Thr Lys Ala Phe Leu Asp
 355 360 365
 Asn Pro Gly Ile Leu Ser Glu Leu Cys Gly Thr Leu Ser Arg Leu Ala
 370 375 380
 Ile Arg Asn Glu Phe Cys Gln Glu Val Val Asp Leu Gly Gly Leu Ser
 385 390 395 400
 Ile Leu Val Ser Leu Leu Ala Asp Cys Asn Asp His Gln Met Arg Asp
 405 410 415
 Gln Ser Gly Val Gln Glu Leu Val Lys Gln Val Leu Ser Thr Leu Arg
 420 425 430
 Ala Ile Ala Gly Asn Asp Asp Val Lys Asp Ala Ile Val Arg Ala Gly
 435 440 445
 Gly Thr Glu Ser Ile Val Ala Ala Met Thr Gln His Leu Thr Ser Pro
 450 455 460
 Gln Val Trp Glu Gln Ser Cys Ala Ala Leu Cys Phe Leu Ala Leu Arg
 465 470 475 480
 Lys Pro Asp Asn Ser Arg Ile Ile Val Glu Gly Gly Gly Ala Val Ala
 485 490 495
 Ala Leu Gln Ala Met Lys Ala His Pro Gln Lys Ala Gly Val Gln Lys
 500 505 510
 Gln Ala Cys Met Leu Ile Arg Asn Leu Val Ala His Gly Gln Ala Phe
 515 520 525
 Ser Lys Pro Ile Leu Asp Leu Gly Ala Glu Ala Leu Ile Met Gln Ala
 530 535 540
 Arg Ser Ala His Arg Asp Cys Glu Asp Val Ala Lys Ala Ala Leu Arg
 545 550 555 560
 Asp Leu Gly Cys His Val Glu Leu Arg Glu Leu Trp Thr Gly Gln Arg
 565 570 575
 Gly Asn Leu Ala Pro
 580

<210> 5113

<211> 472

<212> DNA

<213> Homo sapiens

<400> 5113

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 120
 attggcacgc agcggggagc ctggcacctg cagtgtagac aactggcca ccgctcagtg
 180
 caagagggcc cctttgctaa tgtgcacagc tctttatgcc tttttccta tgcctttttg
 240
 gattggagca agagattttt tttccaagt aaagaacaat ttatgttcct aaatactttt
 300
 tttccttgac atgatgaagt tgagcaaggt ggctatagaa ctttttttct taattttatt
 360
 gcccagtaaa tgttctttac aaagtaggga aatacagata cataaaaaga agactgccaa
 420
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 472

<210> 5114
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 5114
 Met Val Gln Pro Leu Leu His Val Pro Pro Val Gly Leu Cys Asp Leu
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 Ser Pro Gly Thr Leu Thr Arg Cys Leu Phe Cys Ser Pro Leu Asn Ser
 20 25 30
 Met His Leu Thr Pro Val Ile Gly Thr Gln Arg Gly Ala Trp His Leu
 35 40 45
 Gln Cys Arg His Thr Gly His Arg Ser Val Gln Glu Gly Pro Phe Ala
 50 55 60
 Asn Val His Ser Ser Leu Cys Leu Phe Ser Tyr Ala Phe Leu Asp Trp
 65 70 75 80
 Ser Lys Arg Phe Phe Phe Pro Ser Lys Glu Gln Phe Met Phe Leu Asn
 85 90 95
 Thr Phe Phe Pro
 100

<210> 5115
 <211> 1003
 <212> DNA
 <213> Homo sapiens

<400> 5115
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 ttttatttac aaaatatata ctgaatacta tacatctggc cccatcacca tggaaacaac
 120
 tccaaagcct gcctggggat ttgtgcccga gccagccca ggagggttag agaaagcaaa
 180
 ggtgtctacc agccgccgcc atcccagaag gaaagcctct tcccatgagt gcctgtgggt
 240
 gggcgttgag ctcaacaccc acaaaggcca gaaggcctgg gggcagtgag gtgatggtga
 300
 gggcatggga agcagatgct gctgagggtg ggtggaggga gaaatggaga cccagcacc
 360
 agcaggggga gccagggtgac agcaggggga gcagatggca gggccccagg cagtccagga
 420
 ccccaggctc tgaagggtgg ggcaaggggg tcaggtcacg tcttgacatc cagcagtggc
 480
 tccgcttggt ctggtagccc actctgccca gccatgtccc accttgggggt ctcccatgtc
 540
 agagagcagc tcctgctcag catcatgcag ttcctcagct gggcatagc tgtacatggg
 600
 gagcaggtgc atgcgcagcc ggtccacccg ctttttcttc tgtacataca ttaccacagc
 660
 caccaccacc ccgaccaggg tgatgaggaa gaaggggccc aacacatagc ccaccatgga
 720
 gtcgctgttg gcctgggggg cattggggcac agtgggtgta ctcatgacat cagcagccgg
 780

agggctgggt ggtcagcatg ggcagtggcg cttcgggagg ggcctccac tgggctcccc
 840
 agtcgtatgc tcacgtcccc aggtcaaggg ggcagccag ggtggggagg gcgtcaggcc
 900
 gctgctagga tgcgggccag caacagcgga ncaggaggtg gttccacagg cgctgggnag
 960
 gctcacgccg gaggtggggg tgttggggga tgctgatggg tcg
 1003

<210> 5116

<211> 226

<212> PRT

<213> Homo sapiens

<400> 5116

Met	Leu	Leu	Arg	Val	Gly	Gly	Gly	Arg	Asn	Gly	Asp	Pro	Ala	Pro	Ser
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Arg	Gly	Ser	Gln	Val	Thr	Ala	Gly	Glu	Ala	Asp	Gly	Arg	Ala	Pro	Gly
			20					25					30		
Ser	Pro	Gly	Pro	Gln	Ala	Leu	Lys	Gly	Gly	Ala	Arg	Gly	Ser	Gly	His
		35					40					45			
Val	Leu	Thr	Ser	Ser	Ser	Gly	Ser	Ala	Cys	Ala	Gly	Ser	Pro	Leu	Cys
	50					55					60				
Pro	Ala	Met	Ser	His	Leu	Gly	Val	Ser	His	Val	Arg	Glu	Gln	Leu	Leu
65					70					75				80	
Leu	Ser	Ile	Met	Gln	Phe	Leu	Ser	Trp	Val	Ile	Ala	Val	His	Gly	Glu
				85					90					95	
Gln	Val	His	Ala	Gln	Pro	Val	His	Pro	Leu	Phe	Leu	Leu	Tyr	Ile	His
			100					105					110		
Tyr	His	Ser	His	His	His	Pro	Asp	Gln	Gly	Asp	Glu	Glu	Glu	Gly	Pro
		115				120						125			
Gln	His	Ile	Ala	His	His	Gly	Val	Ala	Val	Gly	Leu	Gly	Gly	Ile	Gly
	130					135					140				
His	Ser	Gly	Val	Thr	His	Asp	Ile	Ser	Ser	Arg	Arg	Ala	Gly	Trp	Ser
145					150					155				160	
Ala	Trp	Ala	Val	Ala	Leu	Arg	Glu	Gly	Ala	Ser	Thr	Gly	Leu	Pro	Ser
			165						170					175	
Arg	Met	Leu	Ile	Val	Pro	Gly	Gln	Gly	Gly	Met	Pro	Gly	Trp	Gly	Gly
		180						185					190		
Arg	Gln	Ala	Ala	Ala	Arg	Met	Arg	Ala	Ser	Asn	Ser	Gly	Xaa	Gly	Gly
	195					200						205			
Gly	Ser	His	Gly	Ala	Gly	Xaa	Ala	His	Ala	Gly	Gly	Gly	Gly	Val	Gly
	210				215						220				
Gly	Cys														
225															

<210> 5117

<211> 1180

<212> DNA

<213> Homo sapiens

<400> 5117

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gtgagcatgg ctgagagtga ggaccgctcc ctgaggatcg ttctggtagg gaaaactgga
 120
 agtgggaaaa gtgcaacagc gaacaccatc cttgggagagg aaatctttga ttctagaatt
 180
 gctgccccaa ctgttaccaa gaactgtcaa aaagcatccc gggaatggca ggggagagac
 240
 cttcttggtg tagacactcc agggctcttt gacaccaagg agagcctgga caccacctgc
 300
 aaggaaatca gccgctgcat catctcctcc tgcccagggc cccatgctat tgtcctagtt
 360
 ctgctgctgg gccgctacac agaggaggag cagaaaaccg ttgcattgat caaggctgtc
 420
 tttgggaagt cagccatgaa gcacatggtc atcttgttca ctgcgaaaga agagttggag
 480
 ggccagagct tccatgactt catagcagat gcggatgtgg gcctaaaaag catcgtcaag
 540
 gagtgcgga accgctgctg tgccttttagc aacagcaaga aaaccagtaa ggcagagaag
 600
 gaaagtcaag tgcaggagtt ggtggagctg atagagaaaa tgggtgcagtg caacgaaggg
 660
 gcttactttt ctgatgacat atacaaggac acagaggaaa ggctgaaaca acgggaagag
 720
 gttttgagga aaatctacac tgaccaatta aatgaagaaa tttaaactagt agaagaggat
 780
 aagcataaat cagaggaaga aaaggagaaa gaaattaaat tactaaaatt aaaatatgat
 840
 gaaaaataa aaaatataag ggaagaagct gagagaaata tatttaaaga tgtttttaat
 900
 aggatttgga agatgctttc agaaatatgg cataggtttt tgtcgaaatg taagttttat
 960
 tcttccta at ttactgtgat ttgttaatgg atgaattgta ttttgcaaag atagttagag
 1020
 aaatacctcc ttcccccttag ctttattaag gtatcattga taaataaaaa taaaatatgt
 1080
 ttaatgtata taatgtgatt tttaaatata tatatatata tatacacaca ttgtgaaata
 1140
 atgaaataaa ggtaattaac acatctaaaa aaaaaaaaaa
 1180

<210> 5118

<211> 300

<212> PRT

<213> Homo sapiens

<400> 5118

Met	Ala	Glu	Ser	Glu	Asp	Arg	Ser	Leu	Arg	Ile	Val	Leu	Val	Gly	Lys
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Thr	Gly	Ser	Gly	Lys	Ser	Ala	Thr	Ala	Asn	Thr	Ile	Leu	Gly	Glu	Glu
			20					25					30		
Ile	Phe	Asp	Ser	Arg	Ile	Ala	Ala	Gln	Ala	Val	Thr	Lys	Asn	Cys	Gln
		35					40					45			
Lys	Ala	Ser	Arg	Glu	Trp	Gln	Gly	Arg	Asp	Leu	Leu	Val	Val	Asp	Thr
	50					55				60					
Pro	Gly	Leu	Phe	Asp	Thr	Lys	Glu	Ser	Leu	Asp	Thr	Thr	Cys	Lys	Glu

65					70					75				80
Ile	Ser	Arg	Cys	Ile	Ile	Ser	Ser	Cys	Pro	Gly	Pro	His	Ala	Ile Val
				85					90					95
Leu	Val	Leu	Leu	Leu	Gly	Arg	Tyr	Thr	Glu	Glu	Glu	Gln	Lys	Thr Val
			100					105					110	
Ala	Leu	Ile	Lys	Ala	Val	Phe	Gly	Lys	Ser	Ala	Met	Lys	His	Met Val
		115					120					125		
Ile	Leu	Phe	Thr	Arg	Lys	Glu	Glu	Leu	Glu	Gly	Gln	Ser	Phe	His Asp
	130					135					140			
Phe	Ile	Ala	Asp	Ala	Asp	Val	Gly	Leu	Lys	Ser	Ile	Val	Lys	Glu Cys
145					150					155				160
Gly	Asn	Arg	Cys	Cys	Ala	Phe	Ser	Asn	Ser	Lys	Lys	Thr	Ser	Lys Ala
			165					170						175
Glu	Lys	Glu	Ser	Gln	Val	Gln	Glu	Leu	Val	Glu	Leu	Ile	Glu	Lys Met
			180				185					190		
Val	Gln	Cys	Asn	Glu	Gly	Ala	Tyr	Phe	Ser	Asp	Asp	Ile	Tyr	Lys Asp
		195					200					205		
Thr	Glu	Glu	Arg	Leu	Lys	Gln	Arg	Glu	Glu	Val	Leu	Arg	Lys	Ile Tyr
	210					215					220			
Thr	Asp	Gln	Leu	Asn	Glu	Glu	Ile	Lys	Leu	Val	Glu	Glu	Asp	Lys His
225					230					235				240
Lys	Ser	Glu	Glu	Glu	Lys	Glu	Lys	Glu	Ile	Lys	Leu	Leu	Lys	Leu Lys
			245					250					255	
Tyr	Asp	Glu	Lys	Ile	Lys	Asn	Ile	Arg	Glu	Glu	Ala	Glu	Arg	Asn Ile
		260					265					270		
Phe	Lys	Asp	Val	Phe	Asn	Arg	Ile	Trp	Lys	Met	Leu	Ser	Glu	Ile Trp
		275				280						285		
His	Arg	Phe	Leu	Ser	Lys	Cys	Lys	Phe	Tyr	Ser	Ser			
	290					295					300			

<210> 5119

<211> 1450

<212> DNA

<213> Homo sapiens

<400> 5119

nnaatgatga atatcaaaga ttaaagcact tcactaaatc ttgtattttt tcccaaaata
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 120
 cttcctgtct gtactggaac catcacaggc ttttgaggaa ctacttttga accgttcccc
 180
 agagaggcat ttgccccagt agctatgatt ataatttgca atgacagcca cagtgatttc
 240
 atccttctgg gcttctctaa caagccacat ttggagaaga tactttttng gatcattttt
 300
 attttttatt ttttgactct tgcaggaaat atgggtcatag ttcttgtgtc cttgaaggat
 360
 ccaaaaactcc acatccctat gtatttcttt ctttccaacc tttccttggt agacctctgt
 420
 ttgaccagca gctgtgttcc acagatgttg attaacttct ggggccagaa aaagaccatc
 480
 agctacattg gctgtgccat tcaactctat gtttttttgt ggcttggggc caggaatat
 540

gtccttcttg ttgtcatggc tgtggattgt tatgtagcag tgtgtcatcc actgcaaaat
 600
 accatgatca tgcacccaaa actttgtctg cagctggcta tcttggcatg ggggactggc
 660
 ttggccagtg ctctgatcca gtcccctgcc accctccggt tacccttctg ctcccagcgg
 720
 atgggtggatg atgttggttg tgaagtccca gctctgattc agctctccag tactgatact
 780
 acctacagtg aaattcagat gtctatcgcc agtgttggtc tcttgggtgat gcccttgatc
 840
 attatccttt cctcttcttg tgctattgct aaggctgtgc tgagaattaa gtcaactgca
 900
 ggacagaaga aagcatttgg cacctgcac tctcaccttc ttgtgggttc tctcttttat
 960
 ggcactgtca caggtgtcta ccttcaacca aaaaatcact atcctcatga atggggcaaa
 1020
 tttctcactc ttttctacac tgtagtaacc ccaactctta atccccctcat ctacactcta
 1080
 aggaacaagg aggtaaaggg agcactaata agattgggga ggaggacctg ggattcccag
 1140
 aataactaac aagggttaaca tatgtttacc ttgcttaac ctaagaatag agaacaacct
 1200
 catcacaaaa agctggagat acacctccta agccaaaagt aggagagaaa gagctgcatt
 1260
 ctgttcaggt tgagatttca gtttccttca tcaatcaatt gggcccttaa attcttcata
 1320
 ttgtggattt agacacagta tgggtataaaa attaatatat ttaatagcta ttgtcttgaa
 1380
 aaggacacaa tgcaattgaa tggggggagga ggagaagaca caagaaacac attacttgca
 1440
 aaataaaata
 1450

<210> 5120

<211> 314

<212> PRT

<213> Homo sapiens

<400> 5120

Met	Ile	Ile	Ile	Cys	Asn	Asp	Ser	His	Ser	Asp	Phe	Ile	Leu	Leu	Gly
1				5					10					15	
Phe	Ser	Asn	Lys	Pro	His	Leu	Glu	Lys	Ile	Leu	Phe	Xaa	Ile	Ile	Phe
		20						25					30		
Ile	Phe	Tyr	Phe	Leu	Thr	Leu	Ala	Gly	Asn	Met	Val	Ile	Val	Leu	Val
		35				40					45				
Ser	Leu	Lys	Asp	Pro	Lys	Leu	His	Ile	Pro	Met	Tyr	Phe	Phe	Leu	Ser
	50				55						60				
Asn	Leu	Ser	Leu	Val	Asp	Leu	Cys	Leu	Thr	Ser	Ser	Cys	Val	Pro	Gln
65				70					75					80	
Met	Leu	Ile	Asn	Phe	Trp	Gly	Pro	Glu	Lys	Thr	Ile	Ser	Tyr	Ile	Gly
			85					90						95	
Cys	Ala	Ile	Gln	Leu	Tyr	Val	Phe	Leu	Trp	Leu	Gly	Ala	Thr	Glu	Tyr
		100						105					110		
Val	Leu	Leu	Val	Val	Met	Ala	Val	Asp	Cys	Tyr	Val	Ala	Val	Cys	His

115 120 125
 Pro Leu Gln Asn Thr Met Ile Met His Pro Lys Leu Cys Leu Gln Leu
 130 135 140
 Ala Ile Leu Ala Trp Gly Thr Gly Leu Ala Gln Ser Leu Ile Gln Ser
 145 150 155 160
 Pro Ala Thr Leu Arg Leu Pro Phe Cys Ser Gln Arg Met Val Asp Asp
 165 170 175
 Val Val Cys Glu Val Pro Ala Leu Ile Gln Leu Ser Ser Thr Asp Thr
 180 185 190
 Thr Tyr Ser Glu Ile Gln Met Ser Ile Ala Ser Val Val Leu Leu Val
 195 200 205
 Met Pro Leu Ile Ile Ile Leu Ser Ser Ser Gly Ala Ile Ala Lys Ala
 210 215 220
 Val Leu Arg Ile Lys Ser Thr Ala Gly Gln Lys Lys Ala Phe Gly Thr
 225 230 235 240
 Cys Ile Ser His Leu Leu Val Val Ser Leu Phe Tyr Gly Thr Val Thr
 245 250 255
 Gly Val Tyr Leu Gln Pro Lys Asn His Tyr Pro His Glu Trp Gly Lys
 260 265 270
 Phe Leu Thr Leu Phe Tyr Thr Val Val Thr Pro Thr Leu Asn Pro Leu
 275 280 285
 Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Ile Arg Leu
 290 295 300
 Gly Arg Arg Thr Trp Asp Ser Gln Asn Asn
 305 310

<210> 5121

<211> 944

<212> DNA

<213> Homo sapiens

<400> 5121

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 120
 atagtggagc tgcccactct agaggagctg aaagtagatg aggtgaaaat tagttctgct
 180
 gtgcttaaag ctgcggccca tcactatgga gctcaatgtg ataagcccaa caaggagttt
 240
 atgctctgcc gctgggaaga gaaagatccg aggcggtgtt tagaggaagg caaactggtc
 300
 aacaagtgtg ctttggactt ctttaggcag ataaaacgtc actgtgcaga gccttttaca
 360
 gaatattgga cttgcattga ttatactggc cagcagttat ttcgtcactg tcgcaaacag
 420
 caggcaaagt ttgacgagtg tgtgctggac aaactgggct ggggtcggcc tgacctggga
 480
 gaactgtcaa aggtcaccaa agtgaaaaca gatcgacctt taccggagaa tccctatcac
 540
 tcaagaccaa gaccggatcc cagccctgag atcgagggag atctgcagcc tgccacacat
 600
 ggcagccgct tttatttctg gaccaagtaa agatgggtcc gtggcccaca ctcggtcatg
 660

tgctcagaca acgactgatg aaaacgcccc tgcggtttgc atcgactgat agtgtgttct
 720
 ttccgggatc acaaacatta acaaaaaagt taacttatgt gacttggcag ttattctata
 780
 ccatttcctg tccattaaaa tttttaaagg aaacggttgt attttattat gttttatgtg
 840
 acccttttggc ctttaaagat gacttccccct tgcttttttc ttcttggtgt cctgcctgtt
 900
 cctcttgctt tgcttttaggc actcgtcat gtggtgggg atcc
 944

<210> 5122

<211> 172

<212> PRT

<213> Homo sapiens

<400> 5122

Met	Pro	Gly	Ile	Val	Glu	Leu	Pro	Thr	Leu	Glu	Glu	Leu	Lys	Val	Asp
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Glu	Val	Lys	Ile	Ser	Ser	Ala	Val	Leu	Lys	Ala	Ala	Ala	His	His	Tyr
			20					25					30		
Gly	Ala	Gln	Cys	Asp	Lys	Pro	Asn	Lys	Glu	Phe	Met	Leu	Cys	Arg	Trp
			35				40					45			
Glu	Glu	Lys	Asp	Pro	Arg	Arg	Cys	Leu	Glu	Glu	Gly	Lys	Leu	Val	Asn
	50					55					60				
Lys	Cys	Ala	Leu	Asp	Phe	Phe	Arg	Gln	Ile	Lys	Arg	His	Cys	Ala	Glu
65					70					75				80	
Pro	Phe	Thr	Glu	Tyr	Trp	Thr	Cys	Ile	Asp	Tyr	Thr	Gly	Gln	Gln	Leu
			85					90					95		
Phe	Arg	His	Cys	Arg	Lys	Gln	Gln	Ala	Lys	Phe	Asp	Glu	Cys	Val	Leu
			100					105					110		
Asp	Lys	Leu	Gly	Trp	Val	Arg	Pro	Asp	Leu	Gly	Glu	Leu	Ser	Lys	Val
			115				120					125			
Thr	Lys	Val	Lys	Thr	Asp	Arg	Pro	Leu	Pro	Glu	Asn	Pro	Tyr	His	Ser
	130					135					140				
Arg	Pro	Arg	Pro	Asp	Pro	Ser	Pro	Glu	Ile	Glu	Gly	Asp	Leu	Gln	Pro
145					150					155				160	
Ala	Thr	His	Gly	Ser	Arg	Phe	Tyr	Phe	Trp	Thr	Lys				
			165						170						

<210> 5123

<211> 1139

<212> DNA

<213> Homo sapiens

<400> 5123

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 120
 agccatagga tagatcctgg agcttccttg agcctgtttt cttgcctggg agtttagccat
 180
 gccttggtggg gctgccaaga gggtaaagta gagagatggg tctagcttga tacagtatag
 240

gcagctgctg gatgtcagct gtggttatga tcagctccat cttgttatga tgaagacct
 300
 gaggtcagag tggacccac cccaaagccc catctggcag ctcacagctg ctctctccta
 360
 cagaaacagg cttgcatgct gatccgaaac ctggtggccc acggccaggc cttctcgaag
 420
 cccatcctgg acctgggggc tgaggcactc atcatgcagg cccgatctgc ccaccgtgac
 480
 tgtgaggacg tggccaaggc cgccctgcgg gacctgggtt gtcatgtcga gctccgagag
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<212> PRT

<213> Homo sapiens

<400> 5124

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<212> DNA

<213> Homo sapiens

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 35 40 45
 Glu Ile Leu Cys Met Gln Pro Thr Gly Lys Arg Pro Pro Gly Ser Gln
 50 55 60
 Asp Phe Ser Phe Ser Cys Leu Cys Pro Ala Thr Cys Ser Leu Pro Leu
 65 70 75 80
 Phe Arg Cys Gln Arg Gly Asp Phe Arg Ala Val Cys Phe Asn Pro Gly
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<212> DNA
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<212> PRT
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<400> 5130
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Ser Arg Gln Leu His Phe Arg Leu Leu Glu Glu Arg Gln Gly Val Gly
35 40 45
Gly Val Gly Leu Ser Ala Lys Gly Gly Lys His Pro Gln Asp Arg Asn
50 55 60
Leu Ala Ala Val Gly Pro Glu Val Gln Ala Cys Gly Trp Ala Arg Pro
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<210> 5134

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 35 40 45
 Ser Arg Gly Ser Pro Tyr Arg Glu Ser Pro Leu Gly His Phe Glu Ser
 50 55 60
 Tyr Gly Gly Met Pro Phe Phe Gln Ala Gln Lys Met Phe Val Asp Val
 65 70 75 80
 Pro Glu Asn Thr Val Ile Leu Asp Glu Met Thr Leu Arg His Met Val
 85 90 95
 Gln Asp Cys Thr Ala Val Lys Thr Gln Leu Leu Lys Leu Lys Arg Leu
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 Leu His Gln His Asp Gly Ser Gly Ser Leu His Asp Ile Gln Leu Ser
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 Leu Pro Ser Ser Pro Glu Pro Glu Asp Gly Asp Lys Val Tyr Lys Asn
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<210> 5135
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<211> 341

<212> PRT

<213> Homo sapiens

<400> 5136

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<212> DNA
<213> Homo sapiens
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4317

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<210> 5138

<211> 371

<212> PRT

<213> Homo sapiens

<400> 5138

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Glu	Val	Asp	Asp	Leu	Leu	Cys	Ser	Leu	Leu	Ser	Pro	Pro	Ala	Ser	Leu
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Tyr	Ser	Leu	Pro	Arg	Glu	Thr	Val	Ser	Met	Asp	Leu	Glu	Ser	Glu	Ser

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 Cys Arg Lys Glu Gly Thr Gln Met Thr Pro Gln His Met Glu Glu Leu
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 Ala Glu Gln Glu Ile Ala Arg Leu Val Leu Thr Asp Glu Glu Lys Ser
 115 120 125
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 130 135 140
 Lys Thr Glu Glu Gln Ile Leu Lys Arg Val Arg Arg Lys Ile Arg Asn
 145 150 155 160
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 165 170 175
 Gly Leu Glu Ser Arg Val Leu Lys Tyr Thr Ala Gln Asn Met Glu Leu
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 195 200 205
 Gln Leu Arg Lys Leu Gln Ala Met Val Ile Glu Ile Ser Asn Lys Thr
 210 215 220
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 Leu Leu Val Pro Ala Met Tyr Ser Ser Asp Thr Arg Gly Ser Leu Pro
 245 250 255
 Ala Glu His Gly Val Leu Ser Arg Gln Leu Arg Ala Leu Pro Ser Glu
 260 265 270
 Asp Pro Tyr Gln Leu Glu Leu Pro Ala Leu Gln Ser Glu Val Pro Lys
 275 280 285
 Asp Ser Thr His Gln Trp Leu Asp Gly Ser Asp Cys Val Leu Gln Ala
 290 295 300
 Pro Gly Asn Thr Ser Cys Leu Leu His Tyr Met Pro Gln Ala Pro Ser
 305 310 315 320
 Ala Glu Pro Pro Leu Glu Trp Pro Phe Pro Asp Leu Phe Ser Glu Pro
 325 330 335
 Leu Cys Arg Gly Pro Ile Leu Pro Leu Gln Ala Asn Leu Thr Arg Lys
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 Gly Gly Trp Leu Pro Thr Gly Ser Pro Ser Val Ile Leu Gln Asp Arg
 355 360 365
 Tyr Ser Gly
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<210> 5139

<211> 1968

<212> DNA

<213> Homo sapiens

<400> 5139

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1968

<210> 5140

<211> 443

<212> PRT

<213> Homo sapiens

<400> 5140

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Val Ile Phe Gln Arg Glu Gln Glu Ser Lys Asn Gln Val His Arg Arg
50 55 60
Gly Glu Tyr Asn Val Tyr Ser Thr Phe Gln Ser His Glu Pro Glu Phe
65 70 75 80
Asp Tyr Leu Lys Ser Leu Glu Ile Glu Glu Lys Ile Asn Lys Ile Arg
85 90 95
Trp Leu Pro Gln Gln Asn Ala Ala Tyr Phe Leu Leu Ser Thr Asn Asp
100 105 110
Lys Thr Val Lys Leu Trp Lys Val Ser Glu Arg Asp Lys Arg Pro Glu
115 120 125
Gly Tyr Asn Leu Lys Asp Glu Glu Gly Arg Leu Arg Asp Pro Ala Thr
130 135 140
Ile Thr Thr Leu Arg Val Pro Val Leu Arg Pro Met Asp Leu Met Val
145 150 155 160
Glu Ala Thr Pro Arg Arg Val Phe Ala Asn Ala His Thr Tyr His Ile
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Asn Ser Ile Ser Val Asn Ser Asp Tyr Glu Thr Tyr Met Ser Ala Asp
180 185 190
Asp Leu Arg Ile Asn Leu Trp Asn Phe Glu Ile Thr Asn Gln Ser Phe
195 200 205
Asn Ile Val Asp Ile Lys Pro Ala Asn Met Glu Glu Leu Thr Glu Val
210 215 220
Ile Thr Ala Ala Glu Phe His Pro His His Cys Asn Thr Phe Val Tyr
225 230 235 240
Ser Ser Ser Lys Gly Thr Ile Arg Leu Cys Asp Met Arg Ala Ser Ala
245 250 255
Leu Cys Asp Arg His Thr Lys Phe Phe Glu Glu Pro Glu Asp Pro Ser
260 265 270
Asn Arg Ser Phe Phe Ser Glu Ile Ile Ser Ser Ile Ser Asp Val Lys
275 280 285
Phe Ser His Ser Gly Arg Tyr Ile Met Thr Arg Asp Tyr Leu Thr Val
290 295 300
Lys Val Trp Asp Leu Asn Met Glu Ser Arg Pro Val Glu Thr His Gln
305 310 315 320
Val His Asp Tyr Leu Arg Ser Lys Leu Cys Ser Leu Tyr Glu Asn Asp
325 330 335
Cys Ile Phe Asp Lys Phe Glu Cys Val Trp Asn Gly Ser Asp Ser Val
340 345 350
Ile Met Thr Gly Ser Tyr Asn Asn Phe Phe Arg Met Phe Asp Arg Asp

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Arg Ala Ile Leu Lys	Pro Arg Lys Val Cys Val	Gly Gly Lys Arg Arg		
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Lys Asp Glu Ile Ser	Val Asp Ser Leu Asp Phe	Ser Lys Lys Ile Leu		
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<210> 5141

<211> 928

<212> DNA

<213> Homo sapiens

<400> 5141

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<210> 5142

<211> 227

<212> PRT

<213> Homo sapiens

<400> 5142

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 35 40 45
 Asn Gln Glu His Glu Val Glu Leu Glu Leu Leu Arg Glu Asp Asn Glu
 50 55 60
 Gln Leu Leu Thr Gln Tyr Glu Arg Glu Lys Ala Leu Arg Arg Gln Ala
 65 70 75 80
 Glu Glu Lys Phe Ile Glu Phe Glu Asp Ala Leu Glu Gln Glu Lys Lys
 85 90 95
 Glu Leu Gln Ile Gln Val Glu His Tyr Glu Phe Gln Thr Arg Gln Leu
 100 105 110
 Glu Leu Lys Ala Lys Asn Tyr Ala Asp Gln Ile Ser Arg Leu Glu Glu
 115 120 125
 Arg Glu Ser Glu Met Lys Lys Glu Tyr Asn Ala Leu His Gln Arg His
 130 135 140
 Thr Glu Met Ile Gln Thr Tyr Val Glu His Ile Glu Arg Ser Lys Met
 145 150 155 160
 Gln Gln Val Gly Gly Asn Ser Gln Thr Glu Ser Ser Leu Pro Gly Arg
 165 170 175
 Ser Arg Lys Glu Arg Pro Thr Ser Leu Asn Val Phe Pro Leu Ala Asp
 180 185 190
 Gly Thr Val Arg Ala Gln Ile Gly Gly Lys Leu Val Pro Ala Gly Asp
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 Gln Val Leu
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<210> 5143

<211> 1666

<212> DNA

<213> Homo sapiens

<400> 5143

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<210> 5144

<211> 218

<212> PRT

<213> Homo sapiens

<400> 5144

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			20					25					30		
Gln	Glu	Ala	Ser	Asp	Asn	Cys	Phe	Met	Asp	Ser	Asp	Ile	Lys	Val	Leu

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 Glu Asp Gln Phe Asp Glu Ile Ile Val Asp Ile Ala Thr Lys Arg Lys
 50 55 60
 Gln Tyr Pro Arg Lys Ile Leu Glu Cys Val Ile Lys Thr Ile Lys Ala
 65 70 75 80
 Lys Gln Glu Ile Leu Lys Gln Tyr His Pro Val Val His Pro Leu Asp
 85 90 95
 Leu Lys Tyr Asp Pro Asp Pro Ala Pro His Met Glu Asn Leu Lys Cys
 100 105 110
 Arg Gly Glu Thr Val Ala Lys Glu Ile Ser Glu Ala Met Lys Ser Leu
 115 120 125
 Pro Ala Leu Ile Glu Gln Gly Glu Gly Phe Ser Gln Val Leu Arg Met
 130 135 140
 Gln Pro Val Ile His Leu Gln Arg Ile His Gln Glu Val Phe Ser Ser
 145 150 155 160
 Cys His Arg Lys Pro Asp Ala Lys Pro Glu Asn Phe Ile Thr Gln Ile
 165 170 175
 Glu Thr Thr Pro Thr Glu Thr Ala Ser Arg Lys Thr Ser Asp Met Val
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<210> 5145
 <211> 1885
 <212> DNA
 <213> Homo sapiens

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<210> 5146

<211> 312

<212> PRT

<213> Homo sapiens

<400> 5146

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 Lys Asp Gln Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro
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<210> 5147

<211> 2943

<212> DNA

<213> Homo sapiens

<400> 5147

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<211> 296

<212> PRT

<213> Homo sapiens

<400> 5148

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<210> 5149

<211> 533

<212> DNA

<213> Homo sapiens

<400> 5149

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<210> 5150

<211> 154

<212> PRT

<213> Homo sapiens

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 His Arg Arg Glu Glu Glu Ala Met Lys Gln Ile Thr Gln Leu Leu Pro
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 Glu Asp Leu Arg Lys Glu Leu Tyr Glu Leu Trp Glu Glu Tyr Glu Thr
 65 70 75 80
 Gln Ser Ser Ala Glu Ala Lys Phe Val Lys Gln Leu Asp Gln Cys Glu
 85 90 95
 Met Ile Leu Gln Ala Ser Glu Tyr Glu Asp Leu Glu His Lys Pro Gly
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 Arg Leu Gln Asp Phe Tyr Asp Ser Thr Ala Gly Lys Phe Asn His Pro
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<211> 324

<212> PRT

<213> Homo sapiens

<400> 5152

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 Lys Leu Ser Arg Ala Tyr Asp Gly Thr Thr Tyr Leu Pro Gly Ile Val
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 Gly Leu Asn Asn Ile Lys Ala Asn Asp Tyr Ala Asn Ala Val Leu Gln
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 Val Gln Arg Phe Gly Glu Leu Met Arg Lys Leu Trp Asn Pro Arg Asn
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 Arg Ile Phe Thr Lys Lys Leu Pro His Pro Asp Leu Pro Ala Glu Glu
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 Ser Thr Phe Met Tyr Leu Thr Leu Asp Leu Pro Thr Ala Pro Leu Tyr
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<211> 640

<212> DNA

<213> Homo sapiens

<400> 5153

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<210> 5154

<211> 162

<212> PRT

<213> Homo sapiens

<400> 5154

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Ala	Cys	His	Arg	Trp	Leu	Gln	Glu	Gly	Ser	Thr	Leu	Gly	Gly	Thr
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Glu	Leu	Ala	Phe	Gly	Ala	Asp	Thr	Leu	Leu	Thr	Leu	Pro	Phe	Leu
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Gln	Gly	Val	Pro	Phe	Pro	Gln	Asn	Glu	Ala	Asn	Ala	Met	Asp	Val
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Val	Gln	Phe	Ala	Ile	His	Arg	Leu	Gly	Phe	Gln	Pro	Gln	Asp	Ile
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<210> 5155

<211> 1402

<212> DNA

<213> Homo sapiens

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<210> 5156

<211> 118

<212> PRT

<213> Homo sapiens

<400> 5156

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          20           25           30
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Asp Phe Val Lys Thr Leu Leu Arg Ile Cys Asn Ala Ile Pro Ser Phe
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<210> 5157

<211> 1310

<212> DNA

<213> Homo sapiens

<400> 5157

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<400> 5158

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<210> 5159

<211> 3233

<212> DNA

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<400> 5159

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<211> 849

<212> PRT

<213> Homo sapiens

<400> 5160

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Asp	Trp	Gly	Asn	Glu	Gln	Leu	Gly	Leu	Asp	Leu	Val	Pro	Arg	Lys	Glu

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Pro	Asp	Lys	Pro	Glu	Arg	His	Cys	Ser	Leu	Phe	Val	Asp	Leu	Gly	Ser
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Ser</															

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 Tyr Gly Ser Lys Val Phe Asp Ser Leu Val His Ile Ile Asn Leu Leu
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 Gln Asp Ser Lys Phe His His Phe Lys Pro Val Met Asp Thr Tyr Ile
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 Glu Ser His Phe Ala Gly Ala Leu Ala Tyr Arg Asp Leu Ile Lys Val
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<211> 1645

<212> DNA

<213> Homo sapiens

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<210> 5164

<211> 213

<212> PRT

<213> Homo sapiens

<400> 5164

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			85					90					95		
Arg	His	Gly	Pro	Gly	Gln	Met	Leu	Phe	Gln	Asn	Gly	Asp	Lys	Tyr	Asp
			100					105					110		
Gly	Asp	Trp	Val	Arg	Asp	Arg	Arg	Gln	Gly	His	Gly	Val	Leu	Arg	Cys
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Gly Leu Gly Ser Met Ala His Cys Ser Gly Val Thr Tyr Tyr Gly Leu		
145	150	155
Trp Ile Asn Gly His Pro Ala Glu Gln Ala Thr Arg Ile Val Ile Leu		160
	165	170
Gly Pro Glu Val Met Glu Val Ala Gln Gly Ser Pro Phe Ser Val Asn		175
	180	185
Val Gln Leu Leu Gln Asp His Gly Glu Ile Ala Lys Ser Lys His Leu		190
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Gln Gly Glu Met Thr		205
210		

<210> 5165

<211> 2370

<212> DNA

<213> Homo sapiens

<400> 5165

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<210> 5166

<211> 521

<212> PRT

<213> Homo sapiens

<400> 5166

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20 25 30
 Ala Asp Arg Arg Ser Leu Pro Gly Thr Trp Thr Arg Ser Ser Pro Glu
 35 40 45
 His Thr Thr Ile Leu Arg Gly Gly Val Arg Arg Cys Leu Gln Gln Gln
 50 55 60
 Cys Glu Gln Thr Val Arg Ile Leu His Ala Lys Val Ala Gln Lys Ser
 65 70 75 80
 Tyr Gly Asn Glu Lys Arg Phe Phe Cys Pro Pro Cys Val Tyr Leu
 85 90 95
 Ser Gly Pro Gly Trp Arg Val Lys Pro Gly Gln Asp Gln Ala His Gln
 100 105 110
 Ala Gly Glu Thr Gly Pro Thr Val Cys Gly Tyr Met Gly Leu Asp Ser
 115 120 125
 Ala Ser Gly Ser Ala Thr Glu Thr Gln Lys Leu Asn Phe Glu Gln Gln
 130 135 140
 Pro Asp Ser Arg Glu Phe Gly Cys Ala Lys Thr Leu Tyr Ile Ser Asp
 145 150 155 160
 Ala Asp Lys Arg Lys His Phe Arg Leu Val Leu Arg Leu Val Leu Arg
 165 170 175
 Gly Gly Arg Glu Leu Gly Thr Phe His Ser Arg Leu Ile Lys Val Ile
 180 185 190
 Ser Lys Pro Ser Gln Lys Lys Gln Ser Leu Lys Asn Thr Asp Leu Cys
 195 200 205
 Ile Ser Ser Gly Ser Lys Val Ser Leu Phe Asn Arg Leu Arg Ser Gln
 210 215 220
 Thr Val Ser Thr Arg Tyr Leu Ser Val Glu Asp Gly Ala Phe Val Ala
 225 230 235 240
 Ser Ala Arg Gln Trp Ala Ala Phe Thr Leu His Leu Ala Asp Gly His
 245 250 255
 Ser Ala Gln Gly Asp Phe Pro Pro Arg Glu Gly Tyr Val Arg Tyr Gly
 260 265 270
 Ser Leu Val Gln Leu Val Cys Thr Val Thr Gly Ile Thr Leu Pro Pro
 275 280 285
 Met Ile Arg Lys Val Ala Lys Gln Cys Ala Leu Leu Asp Val Asp
 290 295 300
 Glu Pro Ile Ser Gln Leu His Lys Cys Ala Phe Gln Phe Pro Gly Ser
 305 310 315 320
 Pro Pro Gly Gly Gly Gly Thr Tyr Leu Cys Leu Ala Thr Glu Lys Val
 325 330 335
 Val Gln Phe Gln Ala Ser Pro Cys Pro Lys Glu Ala Asn Arg Ala Leu
 340 345 350
 Leu Asn Asp Ser Ser Cys Trp Thr Ile Ile Gly Thr Glu Ser Val Glu
 355 360 365
 Phe Ser Phe Ser Thr Ser Leu Ala Cys Thr Leu Glu Pro Val Thr Pro
 370 375 380
 Val Pro Leu Ile Ser Thr Leu Glu Leu Ser Gly Gly Asp Val Ala
 385 390 395 400
 Thr Leu Glu Leu His Gly Glu Asn Phe His Ala Gly Leu Lys Val Trp
 405 410 415
 Phe Gly Asp Val Glu Ala Glu Thr Met Tyr Arg Tyr Gly Val Xaa Ser
 420 425 430
 Pro Arg Ser Leu Val Cys Val Val Pro Asp Val Ala Ala Phe Cys Ser
 435 440 445
 Asp Trp Arg Trp Leu Arg Ala Pro Ile Thr Ile Pro Met Ser Leu Val

450		455		460											
Arg	Ala	Asp	Gly	Leu	Phe	Tyr	Pro	Ser	Ala	Phe	Ser	Phe	Thr	Tyr	Thr
465				470					475						480
Pro	Glu	Tyr	Ser	Val	Arg	Pro	Gly	His	Pro	Gly	Val	Pro	Glu	Pro	Ala
			485					490						495	
Thr	Asp	Ala	Asp	Ala	Leu	Leu	Glu	Ser	Ile	His	Gln	Glu	Phe	Thr	Arg
		500					505					510			
Thr	Asn	Phe	His	Leu	Phe	Ile	Gln	Thr							
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<210> 5167

<211> 878

<212> DNA

<213> Homo sapiens

<400> 5167

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780
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<210> 5168

<211> 199

<212> PRT

<213> Homo sapiens

<400> 5168

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 Ser Arg Ala Asp Cys Leu Gly Ala Pro Asn Ile Arg Thr Ala Pro Leu
 35 40 45
 Gly Arg Ser Glu Lys Arg Thr Ala Ile Cys Phe Ser Thr Gly Ala Gln
 50 55 60
 Asp Ser Ser Gln Arg Ala Pro Phe Arg Leu Gln Asn Pro Gly Gln Leu
 65 70 75 80
 Leu Gln Thr Ser Val Arg Asn Leu Val Pro Ser Ile Leu His Thr Ser
 85 90 95
 Tyr His Ala Ile Phe Asn Pro Arg Thr Trp Val Leu Leu Cys Pro Cys
 100 105 110
 Asp Ile Trp Gly Thr Gln Gly Pro Glu Lys Gly Arg Lys Ile Thr His
 115 120 125
 Ala Gly Thr Leu Ser Pro Gln Val Lys Leu Arg Thr Gly Asn Gly Lys
 130 135 140
 Gln Gly Gly Ser Thr Glu Ala Gly Asn Ser Gly Val Ile Ala Trp Leu
 145 150 155 160
 Ser Leu Glu Cys Thr Pro Ser Thr Ser Thr Gln Ser Ser Pro Gln Leu
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 Thr Leu Pro Ser Ser Ala Ser Ser Ile Ser Ser Arg Glu Thr Ile Leu
 180 185 190
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<210> 5169

<211> 609

<212> DNA

<213> Homo sapiens

<400> 5169

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 120
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 609

<210> 5170
 <211> 203
 <212> PRT
 <213> Homo sapiens

<400> 5170
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 20 25 30
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 35 40 45
 Leu Leu Leu Phe Thr Thr Ala Gly Ile Tyr Val Asp Gly Ala Gly Arg
 50 55 60
 Lys Ser Arg Gly His Glu Leu Leu Trp Pro Ala Ala Pro Met Gly Trp
 65 70 75 80
 Gly Tyr Ala Ala Pro Tyr Leu Thr Val Phe Ser Glu Asn Ser Ile Asp
 85 90 95
 Val Phe Asp Val Arg Arg Ala Glu Trp Val Gln Thr Val Pro Leu Lys
 100 105 110
 Lys Val Arg Pro Leu Asn Pro Glu Gly Ser Leu Phe Leu Tyr Gly Thr
 115 120 125
 Glu Lys Val Arg Leu Thr Tyr Leu Arg Asn Gln Leu Ala Glu Lys Asp
 130 135 140
 Glu Phe Asp Ile Pro Asp Leu Thr Asp Asn Ser Arg Arg Gln Leu Phe
 145 150 155 160
 Leu Thr Lys Ser Lys Arg Arg Phe Phe Phe Arg Val Ser Glu Glu Gln
 165 170 175
 Gln Lys Gln Gln Arg Arg Glu Met Leu Lys Asp Pro Phe Val Arg Ser
 180 185 190
 Lys Leu Ile Ser Pro Pro Thr Asn Phe Asn His
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<210> 5171
 <211> 2060
 <212> DNA
 <213> Homo sapiens

<400> 5171
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 420

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540
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600
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720
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780
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aaaaaaaaaa aaaaaaaaaa

2060

<210> 5172

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5172

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 20 25 30
 Gln Gly Ser Ile Lys Asp His Thr Ala Gly Leu Arg Leu Thr Ala Leu
 35 40 45
 Ser Pro Glu His Gln Ser Pro Ala Glu Ser Gly Asp Asn Thr Ser Ser
 50 55 60
 Leu Gln Arg Gly Thr Ser Pro Pro Ala Ala Thr Ser Leu Arg Leu Leu
 65 70 75 80
 Leu Ser Ser Lys Asp Ser Leu Gly Phe Lys Cys His Phe Pro Cys Phe
 85 90 95
 Arg Asp Pro Gly Val Leu Ile Ala
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<210> 5173

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5173

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 120
 tcacagtgtg acaggagac aaatagacct gtcagtagat aacatgaaa taattggact
 180
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 240
 aatggtgagg caataaggat cgtttccctt gatgaaatgg agcttcgaga agaaggcagg
 300
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 360
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 420
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 557

<210> 5174

<211> 93

<212> PRT

<213> Homo sapiens

<400> 5174

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Met Glu Leu Ala Glu Glu Gly Arg Val Ser Cys Gly Glu Leu Trp Leu
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          20          25          30
Glu Thr Lys Arg Ser Pro Leu Gly Thr Val Leu Ser Pro Gly Ala Glu
          35          40          45
Thr Asp Arg Gly Ser Leu Leu Gly Pro Pro Glu Lys Arg Cys Pro Asp
          50          55          60
Ile Trp Cys Ser Gln Ala Val Ser Pro Ala Gly Leu Cys Phe Pro Asp
65          70          75          80
Arg Gln Thr Ser Pro Ser Leu Ser Leu Ser Gly Lys Met
          85          90

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<210> 5175

<211> 272

<212> DNA

<213> Homo sapiens

<400> 5175

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ttcggagcca gccagcctca ctgtgcgtgg cccacaacag ctgtctccat gtgtcacgtg
120
agggctgccc aacaccaggt agggcagcaa cgcccacgcc ctgcgcgggc acagcctccc
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272

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<210> 5176

<211> 90

<212> PRT

<213> Homo sapiens

<400> 5176

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Met Ala Ala Pro Glu Thr Arg Trp Arg Gly Asn His Pro Thr Leu Pro
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Ser Arg Glu Leu Arg Ser Gln Pro Ala Ser Leu Cys Val Ala His Asn
          20          25          30
Ser Cys Leu His Val Ser Arg Glu Gly Cys Pro Thr Pro Gly Arg Ala
          35          40          45
Ala Thr Pro Thr Pro Ser Pro Gly Thr Ala Ser Gln Arg Ser Leu Pro
          50          55          60
Cys Arg Thr Asp Arg Arg Glu Gly Ser Gly Glu Arg Cys Met Pro Pro
65          70          75          80
Gln Ala Cys Ser Glu Gly Pro Xaa Xaa Xaa
          85          90

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<210> 5177

<211> 637

<212> DNA

<213> Homo sapiens

<400> 5177

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gaagaacccc gatcgctgag gagcaagggg gcgctaggaa agggaactgg gttgcgacgg
180
tccggcgaga gagagctggg gtgctggggg gcggggaagt tggggagcag aggccgcttg
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gtgtccgagt agggtaagac cgcaccgacc cagtccgtta ggaaagaagg gaaacgaggc
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360
atggcgaccg cagatactcc ggccccggcc tccagtggcc tctcgccgaa ggaagaaggg
420
gagcttgaag atggggaaat cagtgcgac gataataaca gccagatacg gagtcggagc
480
agcagcagca gcagcggcgg cgggctgtta ccctatccgc gggaaggcc tcctcactcg
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gcccggggcg gtggatctgg cggaggcggt ggctcttctt cgtcatcgtc ctcttctcag
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637

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<210> 5178

<211> 92

<212> PRT

<213> Homo sapiens

<400> 5178

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20          25          30
Asn Ser Gln Ile Arg Ser Arg Ser Ser Ser Ser Ser Ser Gly Gly Gly
35          40          45
Leu Leu Pro Tyr Pro Arg Arg Arg Pro Pro His Ser Ala Arg Gly Gly
50          55          60
Gly Ser Gly Gly Gly Gly Gly Ser Ser Ser Ser Ser Ser Ser Ser Gln
65          70          75          80
Gln Gln Leu Arg Asn Phe Ser Arg Ser Arg His Ala
85          90

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<210> 5179

<211> 1527

<212> DNA

<213> Homo sapiens

<400> 5179

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180
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<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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1560
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1657

<210> 5186

<211> 243
 <212> PRT
 <213> Homo sapiens

<400> 5186
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 35 40 45
 Gly Trp Ser Thr Val Val Arg Ser Gln Leu Thr Ala Thr Ser Ala Ser
 50 55 60
 Arg Phe Lys Arg Phe Ala Cys Leu Cys Leu Ser Tyr Val Pro Phe Arg
 65 70 75 80
 Lys Ile Leu Leu Gln Glu Lys Ile Trp Phe Gln Asp Val Ser Trp Thr
 85 90 95
 Gly Gly His Val Pro Arg Val Pro Arg Thr Gly Trp Val Tyr Arg Asn
 100 105 110
 Val Gln Arg Pro Glu Ser Val Ser Asp His Met Tyr Arg Met Ala Val
 115 120 125
 Met Ala Met Val Ile Lys Asp Asp Arg Leu Asn Lys Asp Xaa Glu Ala
 130 135 140
 Met Lys Gln Ile Thr Gln Leu Leu Pro Glu Asp Leu Arg Lys Glu Leu
 145 150 155 160
 Tyr Glu Leu Trp Glu Glu Tyr Glu Thr Gln Ser Ser Ala Glu Ala Lys
 165 170 175
 Phe Val Lys Gln Leu Asp Gln Cys Glu Met Ile Leu Gln Ala Ser Glu
 180 185 190
 Tyr Glu Asp Leu Glu His Lys Pro Gly Arg Leu Gln Asp Phe Tyr Asp
 195 200 205
 Ser Thr Ala Gly Lys Phe Asn His Pro Glu Ile Val Gln Leu Val Ser
 210 215 220
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 225 230 235 240
 Pro His Ser

<210> 5187
 <211> 1712
 <212> DNA
 <213> Homo sapiens

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caggggatga tgaaattagt tgagcaatta aaagaagaga gagaactgct aagggtccaca
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1140
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1320
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1620
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<210> 5188

<211> 489

<212> PRT

<213> Homo sapiens

<400> 5188

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Ser Val Cys Lys Tyr Tyr Leu Cys Gly Phe Cys Pro Ala Glu Leu Phe
      35           40           45
Thr Asn Thr Arg Ser Asp Leu Gly Pro Cys Glu Lys Ile His Asp Glu
      50           55           60
Asn Leu Arg Lys Gln Tyr Glu Lys Ser Ser Arg Phe Met Lys Val Gly
      65           70           75           80
Tyr Glu Arg Asp Phe Leu Arg Tyr Leu Gln Ser Leu Leu Ala Glu Val
      85           90           95
Glu Arg Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn
      100          105          110
Gln Gln Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Glu Glu Lys
      115          120          125
Ile Gln Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Gln Ile Glu
      130          135          140
Glu Leu Gly Ser Glu Gly Lys Val Glu Glu Ala Gln Gly Met Met Lys
      145          150          155          160
Leu Val Glu Gln Leu Lys Glu Glu Arg Glu Leu Leu Arg Ser Thr Thr
      165          170          175
Ser Thr Ile Glu Ser Phe Ala Ala Gln Glu Lys Gln Met Glu Val Cys
      180          185          190
Glu Val Cys Gly Ala Phe Leu Ile Val Gly Asp Ala Gln Ser Arg Val
      195          200          205
Asp Asp His Leu Met Gly Lys Gln His Met Gly Tyr Ala Lys Ile Lys
      210          215          220
Ala Thr Val Glu Glu Leu Lys Glu Lys Leu Arg Lys Arg Thr Glu Glu
      225          230          235          240
Pro Asp Arg Asp Glu Arg Leu Lys Lys Glu Lys Gln Glu Arg Glu Glu
      245          250          255
Arg Glu Lys Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Lys Arg
      260          265          270
Arg Arg Glu Glu Glu Arg Glu Lys Glu Arg Ala Arg Asp Arg Glu
      275          280          285
Arg Arg Lys Arg Ser Arg Ser Arg Ser Arg His Ser Ser Arg Thr Ser
      290          295          300
Asp Arg Arg Cys Ser Arg Ser Arg Asp His Lys Arg Ser Arg Ser Arg
      305          310          315          320
Glu Arg Arg Arg Ser Arg Ser Arg Asp Arg Arg Arg Ser Arg Ser His
      325          330          335
Asp Arg Ser Glu Arg Lys His Arg Ser Arg Ser Arg Asp Arg Arg Arg
      340          345          350
Ser Lys Ser Arg Asp Arg Lys Ser Tyr Lys His Arg Ser Lys Ser Arg
      355          360          365
Asp Arg Glu Gln Asp Arg Lys Ser Lys Glu Lys Glu Lys Arg Gly Ser
      370          375          380
Asp Asp Lys Lys Ser Ser Val Lys Ser Gly Ser Arg Glu Lys Gln Ser
      385          390          395          400
Glu Asp Thr Asn Thr Glu Ser Lys Glu Ser Asp Thr Lys Asn Glu Val
      405          410          415
Asn Gly Thr Ser Glu Asp Ile Lys Ser Glu Val Gln Arg Lys Tyr Ala

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420 425 430
 Gln Met Lys Met Glu Leu Ser Arg Val Arg Arg His Thr Lys Ala Ser
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 Ser Glu Gly Lys Asp Ser Val Val Leu Gln Asn Ile Leu Arg Tyr Ile
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 465 470 475 480
 Leu Phe Gly Asn Tyr Arg Pro His Leu
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<210> 5189
 <211> 323
 <212> DNA
 <213> Homo sapiens

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 120
 aatccaaaaa taacaaaatg ttttagcaatt caggtaatgt caagcagtat tcaaacacat
 180
 gaagttaatc attccttaat tcctgtttat ttatatattca tttttgcttt ctttttactc
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 gacaaacatc catgtgctgc taa
 323

<210> 5190
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 5190
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 Lys Cys Leu Ser Asn Ser Trp Leu Glu Ser Gly Leu Thr Ile Asn Asn
 20 25 30
 Trp Asn Pro Lys Ile Thr Lys Cys Leu Ala Ile Gln Val Met Ser Ser
 35 40 45
 Ser Ile Gln Thr His Glu Val Asn His Ser Leu Ile Pro Val Tyr Leu
 50 55 60
 Tyr Phe Ile Phe Ala Phe Phe Leu Leu His Val Leu Phe Leu Gln Lys
 65 70 75 80
 Ser Gln Val Lys Cys Phe Trp Gly Thr Leu Gly Gly Gly Asp Lys His
 85 90 95
 Pro Cys Ala Ala
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<210> 5191
 <211> 1632
 <212> DNA
 <213> Homo sapiens

<400> 5191

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180
cgtgggaggc cggtgcgca ggactggaac gcggttcctc cttcttcccc gccccgccc
240
gcttcggcg gaagcggcct caacaaggga aactttattg ttcccgaggc gcagtcagg
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360
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420
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480
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aagttcgaca ccaccttga gagcgcgcgg ccacgcaga ccacatggc gctggtgcag
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ctggagcgcg tgggcctcct ccgttcctg gtcagccaga acgtggacgg gctccatgtg
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1140
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 1632

<210> 5192
 <211> 377
 <212> PRT
 <213> Homo sapiens

<400> 5192
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 35 40 45
 Phe His Thr Gly Ala Gly Ile Ser Thr Ala Ser Gly Ile Pro Asp Phe
 50 55 60
 Arg Gly Pro His Gly Val Trp Thr Met Glu Glu Arg Gly Leu Ala Pro
 65 70 75 80
 Lys Phe Asp Thr Thr Phe Glu Ser Ala Arg Pro Thr Gln Thr His Met
 85 90 95
 Ala Leu Val Gln Leu Glu Arg Val Gly Leu Leu Arg Phe Leu Val Ser
 100 105 110
 Gln Asn Val Asp Gly Leu His Val Arg Ser Gly Phe Pro Arg Asp Lys
 115 120 125
 Leu Ala Glu Leu His Gly Asn Met Phe Val Glu Glu Cys Ala Lys Cys
 130 135 140
 Lys Thr Gln Tyr Val Arg Asp Thr Val Val Gly Thr Met Gly Leu Lys
 145 150 155 160
 Ala Thr Gly Arg Leu Cys Thr Val Ala Lys Ala Arg Gly Leu Arg Ala
 165 170 175
 Cys Arg Gly Gly Cys Glu Ala Pro Glu Asp Ser Pro Gln Leu Pro His
 180 185 190
 Cys Arg Gly Glu Leu Arg Asp Thr Ile Leu Asp Trp Glu Asp Ser Leu
 195 200 205
 Pro Asp Arg Asp Leu Ala Leu Ala Asp Glu Ala Ser Arg Asn Ala Asp
 210 215 220
 Leu Ser Ile Thr Leu Gly Thr Ser Leu Gln Ile Arg Pro Ser Gly Asn
 225 230 235 240
 Leu Pro Leu Ala Thr Lys Arg Arg Gly Gly Arg Leu Val Ile Val Asn
 245 250 255
 Leu Gln Pro Thr Lys His Asp Arg His Ala Asp Leu Arg Ile His Gly
 260 265 270
 Tyr Val Asp Glu Val Met Thr Arg Leu Met Lys His Leu Gly Leu Glu
 275 280 285
 Ile Pro Ala Trp Asp Gly Pro Arg Val Leu Glu Arg Ala Leu Pro Pro
 290 295 300
 Leu Pro Arg Pro Pro Thr Pro Lys Leu Glu Pro Lys Glu Glu Ser Pro
 305 310 315 320
 Thr Arg Ile Asn Gly Ser Ile Pro Ala Gly Pro Lys Gln Glu Pro Cys
 325 330 335
 Ala Gln His Asn Gly Ser Glu Pro Ala Ser Pro Lys Arg Glu Arg Pro

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 Phe Arg Glu Glu Ala Thr Pro Gln Arg
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<210> 5193
 <211> 554
 <212> DNA
 <213> Homo sapiens

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<210> 5194
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 5194
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 Gly Gly Leu Arg Glu Val Cys Leu Cys Gln Ala Cys Ala Ala Ser Gly
 35 40 45
 Gly Gly Ala Cys Pro Ala Ser Ser Ser Leu Val Ser Pro Val Pro Arg
 50 55 60
 Ala Asn Thr Phe Ser Ala Arg Ser Gly Thr Arg Leu Glu Gly Pro Ala
 65 70 75 80
 Leu Pro Arg Pro Arg Leu Gln Pro Asp Ala Ala Ser Thr Arg
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<210> 5195
 <211> 964

<212> DNA

<213> Homo sapiens

<400> 5195

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 gccg
 964

<210> 5196

<211> 267

<212> PRT

<213> Homo sapiens

<400> 5196

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 20 25 30
 Thr Ile Ser Gln Leu Tyr Leu Ser Leu Gly Thr Glu Arg Ala Tyr Lys
 35 40 45
 Ser Ala Leu Asp Tyr Thr Lys Arg Ser Leu Gly Ile Phe Ile Asp Leu
 50 55 60
 Gln Lys Lys Glu Lys Glu Ala His Ala Trp Leu Gln Ala Gly Lys Ile

65		70		75		80									
Tyr	Tyr	Ile	Leu	Arg	Gln	Ser	Glu	Leu	Val	Asp	Leu	Tyr	Ile	Gln	Val
			85					90						95	
Ala	Gln	Asn	Val	Ala	Leu	Tyr	Thr	Gly	Asp	Pro	Asn	Leu	Gly	Leu	Glu
		100						105					110		
Leu	Phe	Glu	Ala	Ala	Gly	Asp	Ile	Phe	Phe	Asp	Gly	Ala	Trp	Glu	Arg
		115					120					125			
Glu	Lys	Ala	Val	Ser	Phe	Tyr	Arg	Asp	Arg	Ala	Leu	Pro	Leu	Ala	Val
		130					135					140			
Thr	Thr	Gly	Asn	Arg	Lys	Ala	Glu	Leu	Arg	Leu	Cys	Asn	Lys	Leu	Val
					150					155					160
Ala	Leu	Leu	Ala	Thr	Leu	Glu	Glu	Pro	Gln	Glu	Gly	Leu	Glu	Phe	Ala
			165						170						175
His	Met	Ala	Leu	Ala	Leu	Ser	Ile	Thr	Leu	Gly	Asp	Arg	Leu	Asn	Glu
			180						185					190	
Arg	Val	Ala	Tyr	His	Arg	Leu	Ala	Ala	Leu	Gln	His	Arg	Leu	Gly	His
		195					200					205			
Gly	Glu	Leu	Ala	Glu	His	Phe	Tyr	Leu	Lys	Ala	Leu	Ser	Leu	Cys	Asn
		210					215					220			
Ser	Pro	Leu	Glu	Phe	Asp	Glu	Glu	Thr	Leu	Tyr	Tyr	Val	Lys	Val	Tyr
					230					235					240
Leu	Val	Leu	Gly	Asp	Ile	Ile	Phe	Tyr	Asp	Leu	Lys	Asp	Pro	Phe	Asp
			245						250					255	
Ala	Ala	Gly	Tyr	Tyr	Gln	Leu	Ala	Leu	Ala	Ala					
			260						265						

<210> 5197

<211> 1045

<212> DNA

<213> Homo sapiens

<400> 5197

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 360
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 420
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 480
 ccgccaggga agcttcatgg ctgggcacca ggccctgact accagaagtc atcaatgggc
 540
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 600
 ttcattcagt cagagatgtc cgaggcgggt gagcgagccc gaaagcgccg ggaagaagag
 660

gagcgccgag cccgggagga gaggctggcc gcctgtgctg ccaaactcaa gcagctggac
 720
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 780
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 840
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 900
 gtgtccccag cagtggcaca gagcaacagc agtgaggaag aggccagaga ggctgggtcc
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 1045

<210> 5198
 <211> 283
 <212> PRT
 <213> Homo sapiens

<400> 5198
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 35 40 45
 Trp Asp Pro Arg Arg Gln Arg Gln Leu Ser Met Ser Ser Ala Asp Ser
 50 55 60
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<211> 248

<212> PRT

<213> Homo sapiens

<400> 5206

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			20					25					30		
Asp	Arg	Arg	Lys	Leu	Arg	Ala	Asp	Val	Thr	Thr	Ala	Phe	Pro	Thr	Leu
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 Ser Gly Gly Asn Pro Ile Leu Phe Glu Leu Glu Lys Asn Leu Tyr Pro
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 Thr Val Tyr Thr Leu Trp Ser Tyr Pro Asp Leu Leu Pro Thr Phe Thr
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 Thr Trp Pro Leu Val Leu Glu Lys Leu Val Gly Gly Ala Asp Leu Met
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 Leu Pro Gly Leu Val Met Pro Pro Ala Gly Leu Pro Gln Val Gln Lys
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 Gly Asp Leu Cys Ala Ile Ser Leu Val Gly Asn Arg Ala Pro Val Ala
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 Ile Gly Val Ala Ala Met Ser Thr Ala Glu Met Leu Thr Ser Gly Leu
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 Lys Gly Arg Gly Phe Ser Val Leu His Thr Tyr Gln Asp His Leu Trp
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 Arg Ser Gly Asn Lys Ser Ser Pro Pro Ser Ile Ala Pro Leu Ala Leu
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 Asp Ser Ala Asp Leu Ser Glu Lys Gly Ser Val Gln Met Asp Ser
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<211> 594

<212> DNA

<213> Homo sapiens

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<211> 85

<212> PRT

<213> Homo sapiens

<400> 5210

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			20					25					30		
Ala	Leu	Leu	Ile	Leu	Tyr	Ala	Leu	Leu	Ser	Arg	Leu	Thr	Gly	Ser	Arg
		35				40						45			
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<211> 602

<212> DNA

<213> Homo sapiens

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35 40 45
Ser Lys Lys Ile Glu Glu Leu Met Lys Ile Gly Ser Asp Val Glu Leu
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Leu Leu Arg Thr Ser Val Ile Gln Gly Ile His Thr Asp His Asn Thr
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<210> 5213
<211> 4387
<212> DNA
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<211> 1364

<212> PRT

<213> Homo sapiens

<400> 5214

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		20					25				30				
Glu	Lys	Thr	Lys	Leu	Ile	Ser	Cys	Leu	Gly	Ala	Phe	Arg	Gln	Phe	Trp
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Lys	Phe	Ile	His	Gly	Gln	His	Ser	Pro	Lys	Arg	Ile	Ser	Phe	Leu	Tyr

4394

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Thr Arg Val Ile Lys Leu Ala His Ala Lys Ser Ser Val Ala Leu Ala		
545	550	555
Pro Ala Leu Val Glu Thr Tyr Ser Arg Leu Leu Val Tyr Met Glu Ile		
565	570	575
Glu Ser Leu Gly Ile Lys Gly Phe Ile Ser Gln Leu Leu Pro Thr Val		
580	585	590
Phe Lys Ser His Ala Trp Gly Ile Leu His Thr Leu Leu Glu Met Phe		
595	600	605
Ser Tyr Arg Met His His Ile Gln Pro His Tyr Arg Val Gln Leu Leu		
610	615	620
Ser His Leu His Thr Leu Ala Ala Val Ala Gln Thr Asn Gln Asn Gln		
625	630	635
Leu His Leu Cys Val Glu Ser Thr Ala Leu Arg Leu Ile Thr Ala Leu		
645	650	655
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660	665	670
Lys Thr Val Leu Ser Ala Glu Ser Glu Glu Leu Asn Arg Ala Leu Ile		
675	680	685
Leu Thr Leu Ala Arg Ala Thr His Val Thr Asp Phe Phe Thr Gly Ser		
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Ser Phe Thr Pro His Asn Trp Ala Ser His Thr Leu Ser Cys Phe Pro		
725	730	735
Gly Pro Leu Gln Ala Phe Phe Lys Gln Asn Asn Val Pro Gln Glu Ser		
740	745	750
Arg Phe Asn Leu Lys Lys Asn Val Glu Glu Glu Tyr Arg Lys Trp Lys		
755	760	765
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770	775	780
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785	790	795
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805	810	815
Arg Ala Leu Val Ala His Val Arg Thr Phe Ala Asp Phe Leu Val Tyr		
820	825	830
Glu Phe Ser Thr Ser Ala Gly Gly Gln Gln Leu Asn Lys Cys Ile Glu		
835	840	845
Ile Leu Asn Asp Met Val Trp Lys Tyr Asn Ile Val Thr Leu Asp Arg		
850	855	860
Leu Ile Leu Cys Leu Ala Met Arg Ser His Glu Gly Asn Glu Ala Gln		
865	870	875
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885	890	895
Arg Asn Arg Val Ser Asp Phe Val Lys Glu Asn Ser Pro Glu His Trp		
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Leu Gln Asn Asp Trp His Thr Lys His Met Asn Tyr His Lys Lys Tyr		
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Pro Glu Lys Leu Tyr Phe Glu Gly Leu Ala Glu Gln Val Asp Pro Pro		

930 935 940
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 Leu Arg Phe Leu Pro Val Phe Asp Ile Val Ile His Arg Phe Leu Glu
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 Gly Leu Tyr Lys Phe His Asp Arg Pro Val Thr Tyr Leu Tyr Asn Thr
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<210> 5215
 <211> 548
 <212> DNA
 <213> Homo sapiens

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 <213> Homo sapiens

<400> 5216
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 35 40 45
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<400> 5217

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<211> 541

<212> PRT

<213> Homo sapiens

<400> 5218

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Ser	Thr	Leu	Arg	Cys	Cys	Ser	Gly	Asn	Ser	Ser	Asp	Trp	Leu	Gly	Gly
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Ser	Pro	Gly	Ala	Ala	Pro	Gly	Thr	Leu	Cys	Cys	Phe	Leu	Trp	Pro	Arg
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Val	Gly	Thr	Gly	Leu	Cys	Pro	Gly	Leu	Ser	Leu	Pro	Gln	Pro	His	Leu
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Pro	His	Cys	Gln	Pro	Gln	Ser	Leu	Pro	Ala	Xaa	Ala	Arg	Val	Leu	Ser
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Tyr	Asp	Ser	Val	Met	Leu	Lys	His	Gln	Cys	Ser	Cys	Gly	Asp	Asn	Ser

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Gly	Val	Gly	Val	Asp	Thr	Asp	Thr	Ile	Trp	Asn	Glu	Leu	His	Ser	Ser						
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Lys	Ile	Leu	Ile	Val	Asp	Trp	Asp	Val	His	His	Gly	Asn	Ala	Thr	Gln						
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Gln	Thr	Phe	Tyr	Gln	Asp	Pro	Ser	Val	Leu	Tyr	Ile	Ser	Leu	His	Arg						
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Pro	Asn	Leu	Asn	Ala	Ile	Arg	Ser	Leu	Glu	Ala	Val	Ile	Arg	Val	His						
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<210> 5219
<211> 1212
<212> DNA
<213> Homo sapiens

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<212> PRT
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      35           40           45
Glu Pro Ser Ser Pro Asn Ala Ala Val Pro Glu Ala Ile Pro Thr Pro
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Arg Ala Ala Ala Ser Ala Ala Leu Glu Leu Pro Leu Gly Pro Ala Pro
      65           70           75           80
Val Ser Val Ala Pro Gln Ala Glu Ala Glu Ala Arg Ser Thr Pro Gly
      85           90           95
Pro Ala Gly Ser Arg Leu Gly Pro Glu Thr Phe Arg Gln Arg Phe Arg
      100          105          110
Gln Phe Arg Tyr Gln Asp Ala Ala Gly Pro Arg Glu Ala Phe Arg Gln
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Leu Arg Glu Leu Ser Arg Gln Trp Leu Arg Pro Asp Ile Arg Thr Lys
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Glu Gln Ile Val Glu Met Leu Val Gln Glu Gln Leu Leu Ala Ile Leu
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<210> 5221

<211> 497

<212> DNA

<213> Homo sapiens

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<210> 5222

<211> 112

<212> PRT

<213> Homo sapiens

<400> 5222

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Ser Leu Val Asp Gly Arg Ile Ile Asp Thr Ser Leu Thr Arg Asp Pro
          35           40           45
Leu Val Ile Glu Leu Gly Gln Lys Gln Val Ile Pro Gly Leu Glu Gln
          50           55           60
Ser Leu Leu Asp Met Cys Val Gly Glu Lys Arg Arg Ala Ile Ile Pro
65           70           75           80
Ser His Leu Ala Tyr Gly Lys Arg Gly Phe Pro Pro Ser Val Pro Gly
          85           90           95
Thr Lys Asp Asn Leu Met Arg Pro Pro Gly Met Thr Ser Ser Ser Gln
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<210> 5223

<211> 637

<212> DNA

<213> Homo sapiens

<400> 5223

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<210> 5224

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5224

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Leu Arg Glu Gly Trp Arg Asp Ser His Gln Pro Ile Met Cys Ser Tyr
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Lys Leu Val Thr Val Lys Phe Glu Val Trp Gly Leu Gln Thr Arg Val
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Glu Gln Phe Val His Lys Val Val Arg Asp Ile Leu Leu Ile Gly His
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Arg Gln Ala Phe Ala Trp Val Asp Glu Trp Tyr Asp Met Thr Met Asp
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Asp Val Arg Glu Tyr Glu Lys Asn Met His Glu Gln Thr Asn Ile Lys
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Gln Thr Ser Thr
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<210> 5225

<211> 394

<212> DNA

<213> Homo sapiens

<400> 5225

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<210> 5226

<211> 113

<212> PRT

<213> Homo sapiens

<400> 5226

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      20           25           30
Phe Ala Ser His Ile Pro Ala Asp Pro Pro Cys Leu Pro Pro Gly Leu
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<211> 2366
<212> DNA
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4406

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<212> PRT

<213> Homo sapiens

<400> 5228

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			20					25					30		
Ile	Phe	Leu	Lys	Gly	Ile	Met	Glu	Asn	Pro	Ile	Val	Lys	Ser	Leu	Ala

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 100 105 110
 Cys Tyr Asp Ser Pro Pro Ser Ser Pro Glu Met Asn Asn Ser Ser Ile
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 145 150 155 160
 Asp Leu Val Ile Ala Arg Ile Leu His Gly Gly Met Ile Asp Arg Gln
 165 170 175
 Gly Leu Leu His Val Gly Asp Ile Ile Lys Glu Val Asn Gly His Glu
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 Val Gly Asn Asn Pro Lys Glu Leu Gln Glu Leu Leu Lys Asn Ile Ser
 195 200 205
 Gly Ser Val Thr Leu Lys Ile Leu Pro Ser Tyr Arg Asp Thr Ile Thr
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 Pro Gln Gln Val Phe Val Lys Cys His Phe Asp Tyr Asn Pro Tyr Asn
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 Tyr Glu Glu Val Ala Lys Met Pro Pro Phe Gln Arg Lys Thr Leu Val
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 Ile Val Leu Asn Pro Thr Arg Phe Gly Thr Thr Val Pro Phe Thr Ser
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 Arg Lys Pro Arg Glu Asp Glu Lys Asp Gly Gln Ala Tyr Lys Phe Val
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 Ser Arg Ser Glu Met Glu Ala Asp Ile Lys Ala Gly Lys Tyr Leu Glu
 405 410 415
 His Gly Glu Tyr Glu Gly Asn Leu Tyr Gly Thr Lys Ile Asp Ser Ile
 420 425 430
 Leu Glu Val Val Gln Thr Gly Arg Thr Cys Ile Leu Asp Val Asn Pro
 435 440 445
 Gln Ala Leu Lys Val Leu Arg Thr Ser Glu Phe Met Pro Tyr Val Val
 450 455 460
 Phe Ile Ala Ala Pro Glu Leu Glu Thr Leu Arg Ala Met His Lys Ala

465		470		475		480									
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Lys	Lys	Thr	Val	Asp	Glu	Ser	Ala	Arg	Ile	Gln	Arg	Ala	Tyr	Asn	His
		500		505		510									
Tyr	Phe	Asp	Leu	Ile	Ile	Ile	Asn	Asp	Asn	Leu	Asp	Lys	Ala	Phe	Glu
		515		520		525									
Lys	Leu	Gln	Thr	Ala	Ile	Glu	Lys	Leu	Arg	Met	Glu	Pro	Gln	Trp	Val
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<212> DNA

<213> Homo sapiens

<400> 5229

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 35 40 45
 Glu Lys Asn Glu Glu Glu Lys Gln Leu His Arg Lys Arg Ala Val Ser
 50 55 60
 Gln Val Pro Pro Thr Val Leu Cys Arg Glu Pro Val Gly Glu Ala Lys
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 Trp Gly Glu Trp Gly Thr Ser Gly Gly Arg Pro Gln Gly Thr Ser Trp
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 Cys Gln Arg Met Val Asp
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 <212> DNA
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 <212> PRT
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 Pro Cys Ala Glu Pro Ala Ala Phe Gly Asp Thr Leu His Ile His Tyr
 50 55 60
 Thr Gly Ser Leu Val Asp Gly Arg Ile Ile Asp Thr Ser Leu Thr Arg
 65 70 75 80
 Asp Pro Leu Val Ile Glu Leu Gly Gln Lys Gln Val Ile Pro Gly Leu
 85 90 95
 Glu Gln Ser Leu Leu Asp Met Cys Val Gly Glu Lys Arg Arg Ala Ile
 100 105 110
 Ile Pro Ser His Leu Ala Tyr Gly Lys Arg Gly Phe Pro Pro Ser Val
 115 120 125
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 Arg Ala Asn Tyr Trp Leu Lys Leu Val Lys Gly Ile Leu Pro Leu Val
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 Gly Met Ala Met Val Pro Ala Leu Leu Gly Leu Ile Gly Tyr His Leu
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 <212> DNA
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<211> 57

<212> PRT

<213> Homo sapiens

<400> 5234

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		20					25					30			
Ile	Ile	Ser	Lys	Glu	Thr	Pro	Pro	Pro	Arg	Leu	Ile	Phe	Lys	Lys	
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<211> 3017

<212> DNA

<213> Homo sapiens

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<210> 5236

<211> 178

<212> PRT

<213> Homo sapiens

<400> 5236

Lys Thr Ile Val Leu Pro Pro Asn Trp Lys Thr Ala Arg Asp Pro Glu

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 Gly Lys Ile Tyr Tyr Tyr His Val Ile Thr Arg Gln Thr Gln Trp Asp
 20 25 30
 Pro Pro Thr Trp Glu Ser Pro Gly Asp Asp Ala Ser Leu Glu His Glu
 35 40 45
 Ala Glu Met Asp Leu Gly Thr Pro Thr Tyr Asp Glu Asn Pro Met Lys
 50 55 60
 Ala Ser Lys Lys Pro Lys Thr Ala Glu Ala Asp Thr Ser Ser Glu Leu
 65 70 75 80
 Ala Lys Lys Ser Lys Glu Val Phe Arg Lys Glu Met Ser Gln Phe Ile
 85 90 95
 Val Gln Cys Leu Asn Pro Tyr Arg Lys Pro Asp Cys Lys Val Gly Arg
 100 105 110
 Ile Thr Thr Thr Glu Asp Phe Lys His Leu Ala Arg Lys Leu Thr His
 115 120 125
 Gly Val Met Asn Lys Glu Leu Lys Tyr Cys Lys Asn Pro Glu Asp Leu
 130 135 140
 Glu Cys Asn Glu Asn Val Lys His Lys Thr Lys Glu Tyr Ile Lys Lys
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 Tyr Met Gln Lys Phe Gly Ala Val Tyr Lys Pro Lys Glu Asp Thr Glu
 165 170 175
 Leu Glu

<210> 5237

<211> 1238

<212> DNA

<213> Homo sapiens

<400> 5237

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 180
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 240
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 1020
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 1080
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 1238

<210> 5238

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5238

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		20						25					30		
Leu	Leu	Gly	Ile	Tyr	Ile	Ile	His	Arg	Ala	Val	Arg	Asn	Pro	Asp	Asp
		35					40					45			
Leu	Glu	Ala	Arg	Ser	His	Met	His	Leu	Ala	Ser	Ala	Phe	Ala	Gly	Ile
	50					55					60				
Gly	Phe	Gly	Asn	Ala	Gly	Val	His	Leu	Cys	His	Gly	Met	Ser	Tyr	Pro
65			70						75					80	
Ile	Ser	Gly	Leu	Val	Lys	Met	Tyr	Lys	Ala	Lys	Asp	Tyr	Asn	Val	Asp
			85						90					95	
His	Pro	Leu	Val	Pro	His	Gly	Leu	Ser	Val	Val	Leu	Thr	Ser	Pro	Ala
		100					105						110		
Val	Phe	Thr	Phe	Thr	Ala	Gln	Met	Phe	Pro	Glu	Arg	His	Leu	Glu	Met
		115					120					125			
Ala	Glu	Ile	Leu	Gly	Ala	Asp	Thr	Arg	Thr	Ala	Arg	Ile	Gln	Asp	Ala
	130					135					140				
Gly	Leu	Val	Leu	Ala	Asp	Thr	Leu	Arg	Lys	Phe	Leu	Phe	Asp	Leu	Asp
145				150						155				160	
Val	Asp	Asp	Gly	Leu	Ala	Ala	Val	Gly	Tyr	Ser	Lys	Ala	Asp	Ile	Pro
			165						170					175	
Ala	Leu	Val	Lys	Gly	Thr	Leu	Pro	Gln	Glu	Arg	Val	Thr	Lys	Leu	Ala
		180					185						190		
Pro	Arg	Pro	Gln	Ser	Glu	Glu	Asp	Leu	Ala	Ala	Leu	Phe	Glu	Ala	Ser
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<210> 5239
<211> 2061
<212> DNA
<213> Homo sapiens

<400> 5239
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120
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180
ggctctagta ctccaccttt gagctgccat gcccaatagg ggaagtccaa aattaaaaat
240
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300
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360
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420
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480
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600
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720
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1320
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1380
cgggaggtat gtgtcaggga tgtgggggac aaaggagatg ccactttggg cccatccaga
1440

tcaaagagag agtccttgag cttcatcttc tcaagcaagg tagcactgtc gggggcctgc
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 1920
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 2040
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<210> 5240

<211> 226

<212> PRT

<213> Homo sapiens

<400> 5240

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Ser	Pro	Ser	Trp	Leu	Val	Ser	Val	Leu	Pro	Thr	Ser	Leu	Leu	Ser	Leu
			20					25					30		
Ser	Ala	Gly	Gly	Thr	Pro	Ser	Gly	Cys	Thr	Val	Ala	Gly	Gly	Leu	Gly
		35					40					45			
Ala	Ser	Gly	Gly	Val	Gly	Ser	Thr	Gly	Thr	Gly	Ala	Ser	Pro	Pro	Thr
	50					55				60					
Thr	Val	Ala	Ile	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
65				70				75					80		
Ser	Ser	Glu	Ser	Val	Ser	Leu	Gly	Gly	Ala	Trp	Gly	Gly	Pro	Gly	Gly
			85					90					95		
Gly	Ser	Leu	Ser	Pro	Arg	Ser	Ala	Phe	Phe	Asn	Phe	Arg	Phe	Leu	Leu
		100					105						110		
Phe	Leu	Ile	Arg	Asp	Leu	Phe	Ser	Pro	Ser	Pro	Gly	Val	Gly	Arg	Gly
		115				120					125				
Leu	Arg	Ser	Thr	Pro	Lys	Pro	Ala	Pro	Ala	Pro	Gly	Pro	Asn	Phe	Arg
	130					135					140				
Phe	Phe	Arg	Ser	Phe	Phe	Arg	Gly	Gly	Trp	Glu	Arg	Ser	Pro	Trp	Glu
145				150				155					160		
Arg	Gly	Thr	Gly	Val	Arg	Ala	Ala	Gly	Gly	Arg	Glu	Val	Cys	Val	Arg
			165					170					175		
Asp	Val	Gly	Asp	Lys	Gly	Asp	Ala	Thr	Leu	Gly	Pro	Ser	Arg	Ser	Lys
		180					185					190			
Arg	Glu	Ser	Leu	Ser	Phe	Ile	Phe	Ser	Ser	Lys	Val	Ala	Leu	Ser	Gly

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 Ala Cys Arg Arg Glu Lys Val Asp Leu Gly Gly Pro Gly Trp Val Gly
 210 215 220
 Pro Ala
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<210> 5241
 <211> 461
 <212> DNA
 <213> Homo sapiens

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 120
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 180
 atcgccacac cttgttcttg ttgtgctggg acggcagcgc cccgtgaggt cagagggttg
 240
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 300
 ctcacctggc cagctctgag ttcagcctct cgcctgtggg gacctctgca tcttggcgcc
 360
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 420
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 461

<210> 5242
 <211> 146
 <212> PRT
 <213> Homo sapiens

<400> 5242
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 Cys Arg Gly Cys Thr His Phe Gln Gly Met Thr Ala Gly Pro His Ser
 20 25 30
 Glu Pro Gln Ala Asp Pro Glu Pro Ser Ser Ser Pro Ser Arg Ala Val
 35 40 45
 Cys Thr Ala Pro Gly Ile Gly Thr Pro Cys Ser Gly Cys Ala Gly Thr
 50 55 60
 Ala Ala Pro Arg Glu Val Arg Gly Leu Leu Ser His Leu Pro Pro Ser
 65 70 75 80
 Val Val Ser Trp Arg Phe Gln Trp Phe Gly Ala Ser Leu Leu Thr Trp
 85 90 95
 Pro Ala Leu Ser Ser Ala Ser Arg Leu Trp Gly Pro Leu His Pro Gly
 100 105 110
 Gly Arg Arg Arg Lys Lys Pro Pro Glu Val Ala Arg Asn Pro Val
 115 120 125
 Ala Gly Glu Val Gly Leu Ser Gln Ala Arg Pro Leu Cys Arg Glu Phe
 130 135 140
 Pro Arg

145

<210> 5243

<211> 344

<212> DNA

<213> Homo sapiens

<400> 5243

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 120
 aattgcagtg aagaaagtgc taggttgtct ttgaagcttg gtgatgctgg aaaccccaga
 180
 agtcttgcta taagattcat ccttaccat tacaacaagt tgtccatcca gagttgggtt
 240
 agtttgcgcc gagtcgagat catttccaac aattcaatcc aagcagtctt taacccaact
 300
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 344

<210> 5244

<211> 114

<212> PRT

<213> Homo sapiens

<400> 5244

Xaa	Ile	Pro	Cys	Ile	Leu	Phe	Trp	Ala	Lys	Arg	Ile	Met	Ile	Lys	Phe
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Lys	Asn	Gln	Thr	Trp	Leu	Asp	Leu	Thr	Asp	Glu	Pro	Phe	Gly	Gln	Lys
			20					25					30		
Val	Thr	Val	Asp	Pro	Asp	Asn	Ser	Asn	Cys	Ser	Glu	Glu	Ser	Ala	Arg
		35					40				45				
Leu	Ser	Leu	Lys	Leu	Gly	Asp	Ala	Gly	Asn	Pro	Arg	Ser	Leu	Ala	Ile
	50				55				60						
Arg	Phe	Ile	Leu	Thr	Asn	Tyr	Asn	Lys	Leu	Ser	Ile	Gln	Ser	Trp	Phe
65				70				75				80			
Ser	Leu	Arg	Arg	Val	Glu	Ile	Ile	Ser	Asn	Asn	Ser	Ile	Gln	Ala	Val
			85				90				95				
Phe	Asn	Pro	Thr	Gly	Val	Tyr	Ala	Pro	Ser	Gly	Tyr	Ser	Tyr	Arg	Cys
			100				105				110				

Gln Arg

<210> 5245

<211> 483

<212> DNA

<213> Homo sapiens

<400> 5245

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 120

ccttgcgaga gtggaaaaaac tggtttggcc aactttctga cagaatcttc tgacatcact
 180
 gaatacagcc caaccaagg agtgaggttt gagtcctgct ggccggccct gatgaaggat
 240
 gctcatggag tggatgatcgt cttcaatgct gacatcccaa gccaccggaa ggaaatggag
 300
 atgtggtatt cctgctttgt ccaacagccg tccttacagg acacacagtg tatgctaatt
 360
 gcacaccaca aaccaggctc tggagatgat aaaggaagcc tgtctttgtc gccacccttg
 420
 aacaagctga agctgggtgca ctcaaactg gaagatgacc ctgaggagat ccggatggaa
 480
 ttc
 483

<210> 5246

<211> 131

<212> PRT

<213> Homo sapiens

<400> 5246

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1				5					10							
Thr	Val	Leu	Ala	Asn	Phe	Leu	Thr	Glu	Ser	Ser	Asp	Ile	Thr	Glu	Tyr	30
			20					25								
Ser	Pro	Thr	Gln	Gly	Val	Arg	Phe	Glu	Ser	Cys	Trp	Pro	Ala	Leu	Met	45
			35				40									
Lys	Asp	Ala	His	Gly	Val	Val	Ile	Val	Phe	Asn	Ala	Asp	Ile	Pro	Ser	60
			50			55										
His	Arg	Lys	Glu	Met	Glu	Met	Trp	Tyr	Ser	Cys	Phe	Val	Gln	Gln	Pro	80
65					70					75						
Ser	Leu	Gln	Asp	Thr	Gln	Cys	Met	Leu	Ile	Ala	His	His	Lys	Pro	Gly	95
			85					90								
Ser	Gly	Asp	Asp	Lys	Gly	Ser	Leu	Ser	Leu	Ser	Pro	Pro	Leu	Asn	Lys	110
			100					105								
Leu	Lys	Leu	Val	His	Ser	Asn	Leu	Glu	Asp	Asp	Pro	Glu	Glu	Ile	Arg	125
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Met	Glu	Phe														
			130													

<210> 5247

<211> 1004

<212> DNA

<213> Homo sapiens

<400> 5247

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 120
 ccttgcgaga gtggaaaaaac tggtttggcc aactttctga cagaatcttc tgacatcact
 180
 gaatacagcc caaccaagg agtgaggatc ctagaatttg agaaccgcga tgttaccagc
 240

aacaacaaag gcacgggctg tgaattcgag ctatgggact gtggtggcga tgctaagttt
300
gagtcctgct ggccggccct gatgaaggat gctcatggag tggatgatcgt cttcaatgct
360
gacatcccaa gccaccggaa ggaaatggag atgtggtatt cctgctttgt ccaacagccg
420
tccttacagg acacacagtg tatgctaatt gcacaccaca aaccaggctc tggagatgat
480
aaaggaagcc tgtctttgtc gccacccttg aacaagctga agctggtgca ctcaaacctg
540
gaagatgacc ctgaggagat ccggatggaa ttcataaagt atttaaaaag cataatcaac
600
tccatgtctg agagcagaga cagggaggag atgtcaatta tgacctagcc agccttcacc
660
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900
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<210> 5248

<211> 185

<212> PRT

<213> Homo sapiens

<400> 5248

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Thr	Val	Leu	Ala	Asn	Phe	Leu	Thr	Glu	Ser	Ser	Asp	Ile	Thr	Glu	Tyr
			20					25					30		
Ser	Pro	Thr	Gln	Gly	Val	Arg	Ile	Leu	Glu	Phe	Glu	Asn	Pro	His	Val
		35				40					45				
Thr	Ser	Asn	Asn	Lys	Gly	Thr	Gly	Cys	Glu	Phe	Glu	Leu	Trp	Asp	Cys
	50				55						60				
Gly	Gly	Asp	Ala	Lys	Phe	Glu	Ser	Cys	Trp	Pro	Ala	Leu	Met	Lys	Asp
65				70				75						80	
Ala	His	Gly	Val	Val	Ile	Val	Phe	Asn	Ala	Asp	Ile	Pro	Ser	His	Arg
			85					90						95	
Lys	Glu	Met	Glu	Met	Trp	Tyr	Ser	Cys	Phe	Val	Gln	Gln	Pro	Ser	Leu
		100						105					110		
Gln	Asp	Thr	Gln	Cys	Met	Leu	Ile	Ala	His	His	Lys	Pro	Gly	Ser	Gly
	115					120						125			
Asp	Asp	Lys	Gly	Ser	Leu	Ser	Leu	Ser	Pro	Pro	Leu	Asn	Lys	Leu	Lys
	130				135						140				
Leu	Val	His	Ser	Asn	Leu	Glu	Asp	Asp	Pro	Glu	Glu	Ile	Arg	Met	Glu
145				150					155					160	
Phe	Ile	Lys	Tyr	Leu	Lys	Ser	Ile	Ile	Asn	Ser	Met	Ser	Glu	Ser	Arg

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 Asp Arg Glu Glu Met Ser Ile Met Thr
 180 185
 <210> 5249
 <211> 653
 <212> DNA
 <213> Homo sapiens
 <400> 5249
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 180
 gagaaagtgg ccaatgtgat tgtggacat tctctgcagg actgtgtgtt cagcaaggaa
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 360
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 420
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 480
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 540
 ctgcaccggg ttggggagca gctggagaaa atgaatgggc agcgcagga tgagctcttt
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 653

<210> 5250
 <211> 217
 <212> PRT
 <213> Homo sapiens

<400> 5250
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 Pro Val Lys Ser Tyr Arg Gly Trp Leu Val Met Gly Glu Pro Ser Arg
 20 25 30
 Glu Glu Tyr Lys Ile Gln Ser Phe Asp Ala Glu Thr Gln Gln Leu Leu
 35 40 45
 Lys Thr Ala Leu Lys Asp Pro Gly Ala Val Asp Leu Glu Lys Val Ala
 50 55 60
 Asn Val Ile Val Asp His Ser Leu Gln Asp Cys Val Phe Ser Lys Glu
 65 70 75 80
 Ala Gly Arg Met Cys Tyr Ala Ile Ile Gln Ala Glu Ser Lys Gln Ala
 85 90 95
 Gly Gln Ser Val Phe Arg Arg Gly Leu Leu Asn Arg Leu Gln Gln Glu
 100 105 110
 Tyr Gln Ala Arg Glu Gln Leu Arg Ala Arg Ser Leu Gln Gly Trp Val

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      115      120      125
Cys Tyr Val Thr Phe Ile Cys Asn Ile Phe Asp Tyr Leu Arg Val Asn
      130      135      140
Asn Met Pro Met Met Ala Leu Val Asn Pro Val Tyr Asp Cys Leu Phe
145      150      155      160
Arg Leu Ala Gln Pro Asp Ser Leu Ser Lys Glu Glu Glu Val Asp Cys
      165      170      175
Leu Val Leu Gln Leu His Arg Val Gly Glu Gln Leu Glu Lys Met Asn
      180      185      190
Gly Gln Arg Met Asp Glu Leu Phe Val Leu Ile Arg Asp Gly Phe Leu
      195      200      205
Leu Pro Thr Gly Leu Ser Ser Leu Ala
      210      215

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<210> 5251
 <211> 372
 <212> DNA
 <213> Homo sapiens

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<210> 5252
 <211> 124
 <212> PRT
 <213> Homo sapiens

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<400> 5252
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      20      25      30
Pro Cys Ile Asn Gly Ser Gly Glu Pro Glu Asp Gly Phe Pro Ala Phe
      35      40      45
Cys Ser Arg Ser Leu Gly Glu Glu Gly Ala Phe Glu Asn Pro Gly Leu
      50      55      60
Tyr Asp Asn Trp Pro Pro His Ile Phe Ala Arg Tyr Ser Pro Ala
65      70      75      80
Asp Arg Lys Ala Ser Arg Leu Ser Ala Asp Lys Leu Ser Ser Asn His
      85      90      95
Tyr Lys Tyr Pro Ala Ser Ala Gln Ser Val Thr Asn Thr Ser Ser Val

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<210> 5253
 <211> 898
 <212> DNA
 <213> Homo sapiens

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 898

<210> 5254
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 5254
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 Leu Cys Gln Gly Pro Glu Pro Val Arg Gly Arg Pro Ala Pro Pro Gly
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 Ser His Arg Gly Pro Pro His Ser

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55

<210> 5255

<211> 1410

<212> DNA

<213> Homo sapiens

<400> 5255

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1410

<210> 5256
<211> 95
<212> PRT
<213> Homo sapiens

<400> 5256
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20 25 30
Pro Pro Ser Pro Val Gly Lys Leu Phe Pro Gly Thr Thr Pro Leu Pro
35 40 45
Ala Ser Pro His Phe Thr Ala Ser Ser Ile Pro Leu Pro Pro Ser Arg
50 55 60
Arg Ile Val Pro Arg Ala Val Phe Leu Gln Gly Val Arg Gly Ile Thr
65 70 75 80
His Ser Trp Arg Leu Ala Arg Arg Gln Ser Glu Ala Arg Asp Thr
85 90 95

<210> 5257
<211> 1366
<212> DNA
<213> Homo sapiens

<400> 5257
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<210> 5258

<211> 375

<212> PRT

<213> Homo sapiens

<400> 5258

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			20				25					30			
Ser	Tyr	Ser	Ala	Ser	Ala	Glu	Pro	Ala	Arg	Val	Arg	Gly	Leu	Val	Tyr
			35				40					45			
Gly	His	His	Gly	Asp	Pro	Ala	Lys	Val	Val	Glu	Leu	Lys	Asn	Leu	Glu
			50				55				60				
Leu	Ala	Ala	Val	Arg	Gly	Ser	Asp	Val	Arg	Val	Lys	Met	Leu	Ala	Ala
65						70				75				80	
Pro	Ile	Asn	Pro	Ser	Asp	Ile	Asn	Met	Ile	Gln	Gly	Asn	Tyr	Gly	Leu
			85					90					95		
Leu	Pro	Glu	Leu	Pro	Ala	Val	Gly	Gly	Asn	Glu	Gly	Val	Ala	Gln	Val
			100					105					110		
Val	Ala	Val	Gly	Ser	Asn	Val	Thr	Gly	Leu	Lys	Pro	Gly	Asp	Trp	Val
			115				120					125			
Ile	Pro	Ala	Asn	Ala	Gly	Leu	Asp	Ser	Gly	Thr	Trp	Arg	Thr	Glu	Ala
			130				135					140			
Val	Phe	Ser	Glu	Glu	Ala	Leu	Ile	Gln	Val	Pro	Ser	Asp	Ile	Pro	Leu
145						150				155				160	
Gln	Ser	Ala	Ala	Thr	Leu	Gly	Val	Asn	Pro	Cys	Thr	Ala	Tyr	Arg	Met
						165			170				175		
Leu	Met	Asp	Phe	Glu	Gln	Leu	Gln	Pro	Gly	Asp	Ser	Val	Ile	Gln	Asn
			180					185					190		
Ala	Ser	Asn	Ser	Gly	Val	Gly	Gln	Ala	Val	Ile	Gln	Ile	Ala	Ala	Ala
			195				200					205			
Leu	Gly	Leu	Arg	Thr	Ile	Asn	Val	Val	Arg	Asp	Arg	Pro	Asp	Ile	Gln

210 215 220
 Lys Leu Ser Asp Arg Leu Lys Ser Leu Gly Ala Glu His Val Ile Thr
 225 230 235 240
 Glu Glu Glu Leu Arg Arg Pro Glu Met Lys Asn Phe Phe Lys Asp Met
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 Pro Gln Pro Arg Leu Ala Leu Asn Cys Val Gly Gly Lys Ser Ser Thr
 260 265 270
 Glu Leu Leu Arg Gln Leu Ala Arg Gly Gly Thr Met Val Thr Tyr Gly
 275 280 285
 Gly Met Ala Lys Gln Pro Val Val Ala Ser Val Ser Leu Leu Ile Phe
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 Lys Asp Leu Lys Leu Arg Gly Phe Trp Leu Ser Gln Trp Lys Lys Asp
 305 310 315 320
 His Ser Pro Asp Gln Phe Lys Glu Leu Ile Leu Thr Leu Cys Asp Leu
 325 330 335
 Ile Arg Arg Gly Gln Leu Thr Ala Pro Ala Cys Ser Gln Val Pro Leu
 340 345 350
 Gln Asp Tyr Gln Ser Ala Leu Glu Ala Ser Met Lys Pro Phe Ile Ser
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 Ser Lys Gln Ile Leu Thr Met
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<210> 5259

<211> 306

<212> DNA

<213> Homo sapiens

<400> 5259

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 180
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<210> 5260

<211> 83

<212> PRT

<213> Homo sapiens

<400> 5260

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 20 25 30
 Leu Gln Lys Ser Ala Thr Leu Pro Ser Thr Thr Val Gln Pro Ser Pro
 35 40 45
 Asp Asp Tyr Gly Thr Glu Leu Leu Arg Arg Tyr His Glu Asn Leu Ser

50	55	60
Glu Ile Phe Thr Asp Asn Gln Ile Leu Leu Lys Met Ile Ser His Met		
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Thr Ser Leu		

<210> 5261

<211> 2394

<212> DNA

<213> Homo sapiens

<400> 5261

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1260

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<210> 5262

<211> 275

<212> PRT

<213> Homo sapiens

<400> 5262

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			20					25						30	
Gly	Lys	Gly	Arg	Phe	Leu	Val	Arg	Ile	Cys	Phe	Gln	Gly	Asp	Glu	Gly
			35				40					45			
Ala	Cys	Pro	Thr	Arg	Asp	Phe	Val	Val	Gly	Ala	Leu	Ile	Leu	Arg	Ser
	50					55					60				

Ile Gly Met Asp Pro Ser Asp Ile Tyr Ala Val Ile Gln Ile Pro Gly
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 Ser Arg Glu Phe Asp Val Ser Phe Arg Ser Ala Glu Lys Leu Ala Leu
 85 90 95
 Phe Leu Arg Val Tyr Glu Glu Lys Arg Glu Gln Glu Asp Cys Trp Glu
 100 105 110
 Asn Phe Val Val Leu Gly Arg Ser Lys Ser Ser Leu Lys Thr Leu Phe
 115 120 125
 Ile Leu Phe Arg Asn Glu Thr Val Asp Val Glu Asp Ile Val Thr Trp
 130 135 140
 Leu Lys Arg His Cys Asp Val Leu Ala Val Pro Val Lys Val Thr Asp
 145 150 155 160
 Arg Phe Gly Ile Trp Thr Gly Glu Tyr Lys Cys Glu Ile Glu Leu Arg
 165 170 175
 Gln Gly Glu Gly Gly Val Arg His Leu Pro Gly Ala Phe Phe Leu Gly
 180 185 190
 Ala Glu Arg Gly Tyr Ser Trp Tyr Lys Gly Gln Pro Lys Thr Cys Phe
 195 200 205
 Lys Cys Gly Ser Arg Thr His Met Ser Gly Ser Cys Thr Gln Asp Arg
 210 215 220
 Cys Phe Arg Cys Gly Glu Glu Gly His Leu Ser Pro Tyr Cys Arg Lys
 225 230 235 240
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<210> 5263

<211> 319

<212> DNA

<213> Homo sapiens

<400> 5263

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<210> 5264

<211> 105

<212> PRT

<213> Homo sapiens

<400> 5264

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 Trp His Phe Asn Ile Asn Gln Lys Arg Phe Ser Lys Ala Gln Pro Thr
 35 40 45
 Cys Phe Leu Leu Ile Leu Pro Pro Cys Gln Lys Ile Met Cys Ile Tyr
 50 55 60
 Phe Gln Leu Leu Leu Met Glu Thr Thr Ala Met Leu Asp Leu Leu Val
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 Ile Arg Gln Leu Lys Ser Ala Leu Ser Gln Thr Leu Leu Cys His Leu
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<210> 5265

<211> 3203

<212> DNA

<213> Homo sapiens

<400> 5265

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<210> 5266

<211> 853

<212> PRT

<213> Homo sapiens

<400> 5266

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 Glu Ala Leu Ala Glu Leu Leu His Gly Ala Leu Leu Arg Arg Gly Pro
 50 55 60
 Glu Met Gly Tyr Leu Pro Gly Pro Pro Leu Gly Pro Glu Gly Gly Glu
 65 70 75 80
 Glu Glu Thr Thr Thr Thr Ile Ile Thr Thr Thr Thr Val Thr Thr Thr
 85 90 95
 Val Thr Ser Pro Val Leu Cys Asn Asn Asn Ile Ser Glu Gly Glu Gly
 100 105 110
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 Glu Ile Gln Val Gln Thr Leu Asn Leu Ser Gln Glu Glu Glu Leu Leu
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 Val Leu Ala Gly Gly Ser Pro Gly Leu Ala Pro Arg Leu Leu Ala
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 180 185 190
 Arg Leu Leu Leu His Phe Gln Ser Pro Arg Val Pro Arg Gly Gly Gly


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Arg Pro Ala His Gly Asp Val Ser Val Thr Asp Leu His Pro Gly Gly
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Thr Ala Thr Phe His Cys Asp Ser Gly Tyr Gln Leu Gln Gly Glu Glu
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Thr Leu Ile Cys Leu Asn Gly Thr Arg Pro Ser Trp Asn Gly Glu Thr
      260              265              270
Pro Ser Cys Met Ala Ser Cys Gly Gly Thr Ile His Asn Ala Thr Leu
      275              280              285
Gly Arg Ile Val Ser Pro Glu Pro Gly Gly Ala Val Gly Pro Asn Leu
      290              295              300
Thr Cys Arg Trp Val Ile Glu Ala Ala Glu Gly Arg Arg Leu His Leu
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His Phe Glu Arg Val Ser Leu Asp Glu Asp Asn Asp Arg Leu Met Val
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Arg Ser Gly Gly Ser Pro Leu Ser Pro Val Ile Tyr Asp Ser Asp Met
      340              345              350
Asp Asp Val Pro Glu Arg Gly Leu Ile Ser Asp Ala Gln Ser Leu Tyr
      355              360              365
Val Glu Leu Leu Ser Glu Thr Pro Ala Asn Pro Leu Leu Leu Ser Leu
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Arg Phe Glu Ala Phe Glu Glu Asp Arg Cys Phe Ala Pro Phe Leu Ala
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His Gly Asn Val Thr Thr Thr Asp Pro Glu Tyr Arg Pro Gly Ala Leu
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Ala Thr Phe Ser Cys Leu Pro Gly Tyr Ala Leu Glu Pro Pro Gly Pro
      420              425              430
Pro Asn Ala Ile Glu Cys Val Asp Pro Thr Glu Pro His Trp Asn Asp
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Thr Glu Pro Ala Cys Lys Ala Met Cys Gly Gly Glu Leu Ser Glu Pro
      450              455              460
Ala Gly Val Val Leu Ser Pro Asp Trp Pro Gln Ser Tyr Ser Pro Gly
  465              470              475              480
Gln Asp Cys Val Trp Gly Val His Val Gln Glu Glu Lys Arg Ile Leu
      485              490              495
Leu Gln Val Glu Ile Leu Asn Val Arg Glu Gly Asp Met Leu Thr Leu
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Phe Asp Gly Asp Gly Pro Ser Ala Arg Val Leu Ala Gln Leu Arg Gly
      515              520              525
Pro Gln Pro Arg Arg Arg Leu Ser Ser Gly Pro Asp Leu Thr Leu
      530              535              540
Gln Phe Gln Ala Pro Pro Gly Pro Pro Asn Pro Gly Leu Gly Gln Gly
  545              550              555              560
Phe Val Leu His Phe Lys Glu Val Pro Arg Asn Asp Thr Cys Pro Glu
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Leu Pro Pro Pro Glu Trp Gly Trp Arg Thr Ala Ser His Gly Asp Leu
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Ile Arg Gly Thr Val Leu Thr Tyr Gln Cys Glu Pro Gly Tyr Glu Leu
      595              600              605
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360
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420
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540

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 720
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 780
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<210> 5268

<211> 279

<212> PRT

<213> Homo sapiens

<400> 5268

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			20					25					30		
Tyr	Ala	Pro	Gln	Thr	Tyr	Ala	Ala	Ile	Pro	Ser	Leu	His	Phe	Pro	Ala
		35					40					45			
Thr	Lys	Gly	His	Leu	Ser	Asn	Arg	Ala	Ile	Ile	Arg	Ala	Pro	Ser	Val
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Arg	Glu	Ile	Tyr	Met	Asn	Val	Pro	Val	Gly	Ala	Ala	Gly	Val	Arg	Gly
65					70					75				80	
Leu	Gly	Gly	Arg	Gly	Tyr	Leu	Ala	Tyr	Thr	Gly	Leu	Gly	Arg	Gly	Tyr
			85					90						95	
Gln	Val	Lys	Gly	Asp	Lys	Arg	Glu	Asp	Lys	Leu	Tyr	Asp	Ile	Leu	Pro
			100					105					110		
Gly	Met	Glu	Leu	Thr	Pro	Met	Asn	Pro	Val	Thr	Leu	Lys	Pro	Gln	Gly
		115					120					125			
Ile	Lys	Leu	Ala	Pro	Gln	Ile	Leu	Glu	Glu	Ile	Cys	Gln	Lys	Asn	Asn
	130					135					140				
Trp	Gly	Gln	Pro	Val	Tyr	Gln	Leu	His	Ser	Ala	Ile	Gly	Gln	Asp	Gln
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Arg	Gln	Leu	Phe	Leu	Tyr	Lys	Ile	Thr	Ile	Pro	Ala	Leu	Ala	Ser	Gln
			165					170						175	
Asn	Pro	Ala	Ile	His	Pro	Phe	Thr	Pro	Pro	Lys	Leu	Ser	Ala	Phe	Val
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Asp	Glu	Ala	Lys	Thr	Tyr	Ala	Ala	Glu	Tyr	Thr	Leu	Gln	Thr	Leu	Gly
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Ile	Pro	Thr	Asp	Gly	Gly	Asp	Gly	Thr	Met	Ala	Thr	Ala	Ala	Ala	Ala
	210					215					220				
Ala	Thr	Ala	Phe	Pro	Gly	Tyr	Ala	Val	Pro	Asn	Ala	Thr	Ala	Pro	Val
225					230					235				240	
Ser	Ala	Ala	Gln	Leu	Lys	Gln	Ala	Val	Thr	Leu	Gly	Gln	Asp	Leu	Ala
			245					250						255	
Ala	Tyr	Thr	Thr	Tyr	Glu	Val	Tyr	Pro	Thr	Phe	Ala	Val	Thr	Ala	Arg
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<211> 1177
<212> DNA
<213> Homo sapiens

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<210> 5270
<211> 327
<212> PRT
<213> Homo sapiens

<400> 5270

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Gln Pro Ile Ser Glu Glu Glu Ala Ile Gln Ile Ile Ala Asp Pro Pro
          35          40          45
Leu Pro Pro Ala Ser Phe Thr Leu Arg Asp Tyr Val Asp His Ser Glu
          50          55          60
Thr Leu Gln Lys Leu Val Leu Leu Gly Val Asp Leu Ser Lys Ile Glu
65          70          75          80
Lys His Pro Glu Ala Ala Asn Leu Leu Leu Arg Leu Asp Phe Glu Lys
          85          90          95
Asp Ile Lys Gln Met Leu Leu Phe Leu Lys Asp Val Gly Ile Glu Asp
          100          105          110
Asn Gln Leu Gly Ala Phe Leu Thr Lys Asn His Ala Ile Phe Ser Glu
          115          120          125
Asp Leu Glu Asn Leu Lys Thr Arg Val Ala Tyr Leu His Ser Lys Asn
          130          135          140
Phe Ser Lys Ala Asp Val Ala Gln Met Val Arg Lys Ala Pro Phe Leu
          145          150          155          160
Leu Asn Phe Ser Val Glu Arg Leu Asp Asn Arg Leu Gly Phe Phe Gln
          165          170          175
Lys Glu Leu Glu Leu Ser Val Lys Lys Thr Arg Asp Leu Val Val Arg
          180          185          190
Leu Pro Arg Leu Leu Thr Gly Ser Leu Glu Pro Val Lys Glu Asn Met
          195          200          205
Lys Val Tyr Arg Leu Glu Leu Gly Phe Lys His Asn Glu Ile Gln His
          210          215          220
Met Ile Thr Arg Ile Pro Lys Met Leu Thr Ala Asn Lys Met Lys Leu
          225          230          235          240
Thr Glu Thr Phe Asp Phe Val His Asn Val Met Ser Ile Pro His His
          245          250          255
Ile Ile Val Lys Phe Pro Gln Val Phe Asn Thr Arg Leu Phe Lys Val
          260          265          270
Lys Glu Arg His Leu Phe Leu Thr Tyr Leu Gly Arg Ala Gln Tyr Asp
          275          280          285
Pro Ala Lys Pro Asn Tyr Ile Ser Leu Asp Lys Leu Val Ser Ile Pro
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<210> 5271

<211> 1185

<212> DNA

<213> Homo sapiens

<400> 5271

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120

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<211> 385

<212> PRT

<213> Homo sapiens

<400> 5272

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			20					25					30		
Glu	Cys	Gly	Asn	Val	Thr	Gly	Ala	Ser	Ser	Pro	Ser	Arg	Thr	Pro	Phe
		35					40					45			
Gln	Asn	Pro	Ser	Leu	Leu	Leu	Val	His	Lys	Gln	Lys	Leu	Ala	Lys	Trp
		50				55				60					
Val	Ala	Ile	Gln	Ser	Val	Ser	Ala	Trp	Pro	Glu	Lys	Arg	Gly	Glu	Ile
65					70					75				80	
Arg	Arg	Met	Met	Glu	Val	Ala	Ala	Ala	Asp	Val	Lys	Gln	Leu	Gly	Gly

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 Gln Lys Lys Thr Val Cys Ile Tyr Gly His Leu Asp Val Gln Pro Ala
 130 135 140
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 145 150 155 160
 Asp Gly Lys Leu Tyr Gly Arg Gly Ser Thr Asp Asp Lys Gly Pro Val
 165 170 175
 Ala Gly Trp Ile Asn Ala Leu Glu Ala Tyr Gln Lys Thr Gly Gln Glu
 180 185 190
 Ile Pro Val Asn Val Arg Phe Cys Leu Glu Gly Met Glu Glu Ser Gly
 195 200 205
 Ser Glu Gly Leu Asp Glu Leu Ile Phe Ala Arg Lys Asp Thr Phe Phe
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 Lys Asp Val Asp Tyr Val Cys Ile Ser Asp Asn Tyr Trp Leu Gly Lys
 225 230 235 240
 Lys Lys Pro Cys Ile Thr Tyr Gly Leu Arg Gly Ile Cys Tyr Phe Phe
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 260 265 270
 Gly Ser Val His Glu Ala Met Thr Asp Leu Ile Leu Leu Met Gly Ser
 275 280 285
 Leu Val Asp Lys Arg Gly Asn Ile Leu Ile Pro Gly Ile Asn Glu Ala
 290 295 300
 Val Ala Ala Val Thr Glu Glu His Lys Leu Tyr Asp Asp Ile Asp
 305 310 315 320
 Phe Asp Ile Glu Glu Phe Ala Lys Asp Val Gly Ala Gln Ile Leu Leu
 325 330 335
 His Ser His Lys Lys Asp Ile Leu Met His Arg Trp Arg Tyr Pro Ser
 340 345 350
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<210> 5273

<211> 4580

<212> DNA

<213> Homo sapiens

<400> 5273

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2280
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2400
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<210> 5274

<211> 185

<212> PRT

<213> Homo sapiens

<400> 5274

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			20					25					30		
Val	Thr	Pro	Arg	Ile	Tyr	Val	Gly	Asn	Ala	Ser	Val	Ala	Gln	Asp	Ile
			35				40					45			
Pro	Lys	Leu	Gln	Lys	Leu	Gly	Ile	Thr	His	Val	Leu	Asn	Ala	Ala	Glu
		50				55					60				
Gly	Arg	Ser	Phe	Met	His	Val	Asn	Thr	Asn	Ala	Asn	Phe	Tyr	Lys	Asp

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65          70          75          80
Ser Gly Ile Thr Tyr Leu Gly Ile Lys Ala Asn Asp Thr Gln Glu Phe
          85          90          95
Asn Leu Ser Ala Tyr Phe Glu Arg Ala Ala Asp Phe Ile Asp Gln Ala
          100          105          110
Leu Ala Gln Lys Asn Gly Arg Val Leu Val His Cys Arg Glu Gly Tyr
          115          120          125
Ser Arg Ser Pro Thr Leu Val Ile Ala Tyr Leu Met Met Arg Gln Lys
          130          135          140
Met Asp Val Lys Ser Ala Leu Ser Ile Val Arg Gln Asn Arg Glu Ile
          145          150          155          160
Gly Pro Asn Asp Gly Phe Leu Ala Gln Leu Cys Gln Leu Asn Asp Arg
          165          170          175
Leu Ala Lys Glu Gly Lys Leu Lys Pro
          180          185

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<210> 5275

<211> 810

<212> DNA

<213> Homo sapiens

<400> 5275

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120
atgtcctgca tctaacgcgg tgtgaccccc gaagccgagc gagctccgga ggaatttcag
180
tatctgctac ggtaacttca tcagcccgcc aagatggcga tgcaagcggc caagagggcg
240
aacattcgac ttccacctga agtaaactcg atattgtata taagaaattt gccatacaaa
300
atcacagctg aagaaatgta tgatatattt gggaaatatg gacctattcg tcaaatacaga
360
gtggggaaca cacctgaaac tagaggaaca gcttatgttg tctatgagga catctttgat
420
gccaagaatg catgtgatca cctatcgga ttcaatgttt gtaacagata ccttgtggtt
480
ttgtactata atgccaacag ggcatttcag aagatggaca caaagaagaa ggaggaacag
540
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600
acattttcat ttggactaaa tcccacgaat gacaactacc accttttttt cctttttaat
660
taatactaaa tattgtgatt tcttatttga ggttcaaaat gacctgcttg aaactttgat
720
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780
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810

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<210> 5276

<211> 125

<212> PRT

<213> Homo sapiens

<400> 5276

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Val Asn Arg Ile Leu Tyr Ile Arg Asn Leu Pro Tyr Lys Ile Thr Ala
      20           25           30
Glu Glu Met Tyr Asp Ile Phe Gly Lys Tyr Gly Pro Ile Arg Gln Ile
      35           40           45
Arg Val Gly Asn Thr Pro Glu Thr Arg Gly Thr Ala Tyr Val Val Tyr
      50           55           60
Glu Asp Ile Phe Asp Ala Lys Asn Ala Cys Asp His Leu Ser Gly Phe
65           70           75           80
Asn Val Cys Asn Arg Tyr Leu Val Val Leu Tyr Tyr Asn Ala Asn Arg
      85           90           95
Ala Phe Gln Lys Met Asp Thr Lys Lys Lys Glu Glu Gln Leu Lys Leu
      100          105          110
Leu Lys Glu Lys Tyr Gly Ile Asn Thr Asp Pro Pro Lys
      115          120          125

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<210> 5277

<211> 612

<212> DNA

<213> Homo sapiens

<400> 5277

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120
accctgtccc tgcccttcta catctcccag tgctggaccc tcggctccgt cctggcgctc
180
acctggaccg tctggcgctt cttcctgcgg gacatcacat tgaggtacaa ggagaccggg
240
tggcagaagt ggcagaacaa ggatgaccag ggcagcaccg tcggcaacgg ggaccagcac
300
ccactggggc tggacgaaga cctgctgggg cctgggggtgg ccgagggcga gggagcacca
360
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420
gcctcctcct gtgtgagtc caccaggagc cacgtgcccg gccttgccct caagggtttt
480
tgcttttctc ctgtgcacct ggcgaggctg aaggcgaggg gtggaggagg cccagcaca
540
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tgtgtgtacg tg
612

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<210> 5278

<211> 123

<212> PRT

<213> Homo sapiens

<400> 5278

Ile Tyr Asp Phe Met Asp Asp Pro Lys Pro His Lys Lys Leu Gly Pro
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 20 25 30
 Val Lys Tyr Asp Pro His Thr Leu Thr Leu Ser Leu Pro Phe Tyr Ile
 35 40 45
 Ser Gln Cys Trp Thr Leu Gly Ser Val Leu Ala Leu Thr Trp Thr Val
 50 55 60
 Trp Arg Phe Phe Leu Arg Asp Ile Thr Leu Arg Tyr Lys Glu Thr Arg
 65 70 75 80
 Trp Gln Lys Trp Gln Asn Lys Asp Asp Gln Gly Ser Thr Val Gly Asn
 85 90 95
 Gly Asp Gln His Pro Leu Gly Leu Asp Glu Asp Leu Leu Gly Pro Gly
 100 105 110
 Val Ala Glu Gly Glu Gly Ala Pro Thr Pro Asn
 115 120

<210> 5279

<211> 1225

<212> DNA

<213> Homo sapiens

<400> 5279

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 120
 ctactcccta agctgattgc aggtggccac aaagtactca tcttctccca gatgggtgcg
 180
 tgccctcgaca tcctagaaga ttatttaatc cagagaagat acacctatga acgtattgat
 240
 gggcgagtac ggggaaacct gcgccaggct gccatcgacc gcttcagcaa gcctgactca
 300
 gaccgctttg tcttcttact gtgcaccaga gcgggaggcc tggggatcaa tctcacagct
 360
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 420
 gcccgatgtc accgcatagg ccagagcaaa gctgtgaagg tgtatcgct catcactcga
 480
 aattcctacg agcgcgagat gtttgacaag gccagcctaa agctggggct ggacaaggct
 540
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 gtggaggacc tactccggaa aggtgcttat ggagccttaa tggatgaaga agatgaaggc
 660
 tccaagtctt gtgaagaaga catagaccag attctgcaga ggcgaacgca caccatcacc
 720
 atccagtctg aggggaaagg gtccactttt gccaaaggcta gctttgtggc ttcaggaaac
 780
 agaacagata tttccttaga tgatcctaac ttttggcaga aatgggctaa aatagctgaa
 840
 ctgacactg aagcaaagaa tgaaaaggaa agcttagtga tcgaccgacc tcgcgtgaga
 900

aagcagacca aacactacaa ctcgtttgag gaagacgagc tcatggagtt ttcagagtta
 960
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 1020
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 1080
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<210> 5280

<211> 408

<212> PRT

<213> Homo sapiens

<400> 5280

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			20					25					30		
Gly	Lys	Leu	Val	Leu	Ile	Asp	Lys	Leu	Leu	Pro	Lys	Leu	Ile	Ala	Gly
		35					40					45			
Gly	His	Lys	Val	Leu	Ile	Phe	Ser	Gln	Met	Val	Arg	Cys	Leu	Asp	Ile
	50					55				60					
Leu	Glu	Asp	Tyr	Leu	Ile	Gln	Arg	Arg	Tyr	Thr	Tyr	Glu	Arg	Ile	Asp
65				70					75					80	
Gly	Arg	Val	Arg	Gly	Asn	Leu	Arg	Gln	Ala	Ala	Ile	Asp	Arg	Phe	Ser
			85					90					95		
Lys	Pro	Asp	Ser	Asp	Arg	Phe	Val	Phe	Leu	Leu	Cys	Thr	Arg	Ala	Gly
		100						105					110		
Gly	Leu	Gly	Ile	Asn	Leu	Thr	Ala	Ala	Asp	Thr	Cys	Ile	Ile	Phe	Asp
		115					120					125			
Ser	Asp	Trp	Asn	Pro	Gln	Asn	Asp	Leu	Gln	Ala	Gln	Ala	Arg	Cys	His
	130				135					140					
Arg	Ile	Gly	Gln	Ser	Lys	Ala	Val	Lys	Val	Tyr	Arg	Leu	Ile	Thr	Arg
145				150					155					160	
Asn	Ser	Tyr	Glu	Arg	Glu	Met	Phe	Asp	Lys	Ala	Ser	Leu	Lys	Leu	Gly
			165					170					175		
Leu	Asp	Lys	Ala	Val	Leu	Gln	Thr	Ser	Thr	Glu	Arg	Ala	Ala	Pro	Met
		180					185					190			
Gly	Thr	Ala	Leu	Ser	Lys	Met	Glu	Val	Glu	Asp	Leu	Leu	Arg	Lys	Gly
		195				200					205				
Ala	Tyr	Gly	Ala	Leu	Met	Asp	Glu	Glu	Asp	Glu	Gly	Ser	Lys	Phe	Cys
	210					215					220				
Glu	Glu	Asp	Ile	Asp	Gln	Ile	Leu	Gln	Arg	Arg	Thr	His	Thr	Ile	Thr
225				230					235					240	
Ile	Gln	Ser	Glu	Gly	Lys	Gly	Ser	Thr	Phe	Ala	Lys	Ala	Ser	Phe	Val
			245					250					255		
Ala	Ser	Gly	Asn	Arg	Thr	Asp	Ile	Ser	Leu	Asp	Asp	Pro	Asn	Phe	Trp
		260					265					270			
Gln	Lys	Trp	Ala	Lys	Ile	Ala	Glu	Leu	Asp	Thr	Glu	Ala	Lys	Asn	Glu

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      275              280              285
Lys Glu Ser Leu Val Ile Asp Arg Pro Arg Val Arg Lys Gln Thr Lys
      290              295              300
His Tyr Asn Ser Phe Glu Glu Asp Glu Leu Met Glu Phe Ser Glu Leu
305              310              315              320
Asp Ser Asp Ser Asp Glu Arg Pro Thr Arg Ser Arg Arg Leu Asn Asp
      325              330              335
Lys Ala Arg Arg Tyr Leu Arg Ala Glu Cys Phe Arg Val Glu Lys Asn
      340              345              350
Leu Leu Ile Phe Gly Trp Gly Arg Trp Lys Asp Ile Leu Thr His Gly
      355              360              365
Arg Phe Lys Trp His Leu Asn Glu Lys Asp Met Glu Met Ile Cys Arg
      370              375              380
Ala Leu Leu Val Tyr Cys Val Lys His Tyr Lys Gly Asp Glu Lys Ile
385              390              395              400
Lys Ser Phe Ile Trp Glu Leu Ile
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<210> 5281

<211> 336

<212> DNA

<213> Homo sapiens

<400> 5281

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120
aggcattcct ggtactcaca ggtctgacag ccacagttgg agacacagct atttcttcag
180
aagagaaaac acaacgcacg tcattaatga gacatcacat gggacaatca ttgtccaaag
240
aagttgcaca tgtcctcacc aaacctggag cagatcacga ttgggaaaac ctagagaaag
300
acttgagatt gctcattaat ggggattatg aagaag
336

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<210> 5282

<211> 91

<212> PRT

<213> Homo sapiens

<400> 5282

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Met Gln Thr Ala Gln Asn Lys Tyr Gln Glu Leu Lys Asn Ile Cys Ser
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Tyr Arg Ala Gln Ala Phe Leu Val Leu Thr Gly Leu Thr Ala Thr Val
      20              25              30
Gly Asp Thr Ala Ile Ser Ser Glu Glu Lys Thr Gln Arg Met Ser Leu
      35              40              45
Met Arg His His Met Gly Gln Ser Leu Ser Lys Glu Val Ala His Val
      50              55              60
Leu Thr Lys Pro Gly Ala Asp His Asp Trp Glu Asn Leu Glu Lys Asp
      65              70              75              80
Leu Arg Leu Leu Ile Asn Gly Asp Tyr Glu Glu

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85

90

<210> 5283
<211> 1989
<212> DNA
<213> Homo sapiens

<400> 5283
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atggatggca tcattgaaca gaagagcatg ctggtgcaca gtaaaatcag tgatgtgtggc
180
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240
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420
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1380

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 1560
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 1680
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 1860
 cttcatgctg cttaagttac cagatgaatg ctgagaaata agtaatcaca gacatttta
 1920
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 1980
 ttctgctta
 1989

<210> 5284

<211> 258

<212> PRT

<213> Homo sapiens

<400> 5284

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Ser	Asp	Ala	Gly	Lys	Arg	Asn	Gly	Leu	Ile	Asn	Thr	Arg	Asn	Leu	Met
		20						25					30		
Ala	Glu	Ser	Arg	Asp	Gly	Leu	Val	Ser	Val	Tyr	Pro	Ala	Pro	Gln	Tyr
		35					40					45			
Gln	Ser	His	Arg	Val	Gly	Ala	Ser	Thr	Val	Pro	Ala	Ser	Leu	Asp	Ser
		50				55					60				
Ser	Arg	Ser	Glu	Pro	Met	Gln	Gln	Leu	Leu	Asp	Pro	Asn	Thr	Leu	Gln
65					70					75				80	
Gln	Ser	Val	Glu	Ser	Arg	Tyr	Arg	Pro	Asn	Ile	Ile	Leu	Tyr	Ser	Glu
			85						90					95	
Gly	Val	Leu	Arg	Ser	Trp	Gly	Asp	Gly	Val	Ala	Ala	Asp	Cys	Cys	Glu
		100						105					110		
Thr	Thr	Phe	Ile	Glu	Asp	Arg	Ser	Pro	Thr	Lys	Asp	Ser	Leu	Glu	Tyr
		115					120					125			
Pro	Asp	Gly	Lys	Phe	Ile	Asp	Leu	Ser	Ala	Asp	Asp	Ile	Lys	Ile	His
		130				135					140				
Thr	Leu	Ser	Tyr	Asp	Val	Glu	Glu	Glu	Glu	Glu	Phe	Gln	Glu	Leu	Glu
145				150						155				160	
Ser	Asp	Tyr	Ser	Ser	Asp	Thr	Glu	Ser	Glu	Asp	Asn	Phe	Leu	Met	Met
			165						170					175	
Pro	Pro	Arg	Asp	His	Leu	Gly	Leu	Ser	Val	Phe	Ser	Met	Leu	Cys	Cys
			180					185					190		
Phe	Trp	Pro	Leu	Gly	Ile	Ala	Ala	Phe	Tyr	Leu	Ser	His	Glu	Thr	Asn

	195		200		205														
Lys	Ala	Val	Ala	Lys	Gly	Asp	Leu	His	Gln	Ala	Ser	Thr	Ser	Ser	Arg				
	210					215					220								
Arg	Ala	Leu	Phe	Leu	Ala	Val	Leu	Ser	Ile	Thr	Ile	Gly	Thr	Gly	Val				
225					230					235					240				
Tyr	Val	Gly	Val	Ala	Val	Ala	Leu	Ile	Ala	Tyr	Leu	Ser	Lys	Asn	Asn				
				245					250					255					

His Leu

<210> 5285

<211> 2155

<212> DNA

<213> Homo sapiens

<400> 5285

nnacgcgtgc agcaaagaat ggaggagtcg gaacccgaac ggaagcgggc tcgcaccgac
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 120
 ccctatgtgc cgttacggca gcgccggcag ctactgctcc agaagctgct gcagcgaaga
 180
 cgcaagggag ctgcggagga agagcagcag gacagcggta gtgaaccccg gggagatgag
 240
 gacgacatcc cgctaggccc tcagtccaac gtcagcctcc tggatcagca ccagcacctt
 300
 aaagagaagg ctgaagcgcg caaagagtct gccaaaggaga agcagctgaa ggaagaagag
 360
 aagatcctgg agagtgttgc cgagggccga gcattgatgt cagtgaagga gatggctaag
 420
 ggcatcactg atgatgaccc catcaaaacc agctggactc caccocgtta tgttctgagc
 480
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 540
 ggtatcccac caccatcaa gagcttcaag gaaatgaagt ttcttcagc catcctgaga
 600
 ggctgaaga agaaaggcat tcaccaccca acacccattc agatccaggg catccccacc
 660
 attctatctg gccgtgacat gataggcatc gctttcacgg gttcaggcaa gacactgggtg
 720
 ttacggttgc ccgtcatcat gttctgcctg gaacaagaga agaggttacc cttctcaaag
 780
 cgcgaggggc cctatggact catcatctgc ccctcgcggg agctggcccg gcagacccat
 840
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 960
 cacatgatgg tggccacccc ggggcgcctc atggatttgc tgcagaagaa gatggtcagc
 1020
 ctagacatct gtcgctacct ggccctggac gaggctgacc gcatgatcga catgggcttc
 1080
 gaggtgaca tccgtaccat cttctcctac ttcaagggcc agcgacagac cctgctcttc
 1140

agtgccacca tgccgaagaa gattcagaac ttgctaaga gtgcccttgt aaagcctgtg
 1200
 accatcaatg tggggcggtgc tggggctgcc agcctggatg tcatccagga ggtagaatat
 1260
 gtgaaggagg aggccaagat ggtgtacctg ctgagtgcc tgcagaagac acccccgctt
 1320
 gtactcatct ttgcagagaa gaaggcagac gtggacgcca tccacgagta cctgctgctc
 1380
 aaggggggttg agggcgtagc catccatggg ggcaaagacc aggaggaacg gactaaggcc
 1440
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 1500
 ggcttgact tccctgccat ccagcacgtc atcaattatg acatgccaga ggagattgag
 1560
 aactatgtac accggattgg ccgcaccggg cgctcgggaa acacaggcat cgccactacc
 1620
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 1680
 gccaagcaga aggtgccgcc cgtgctgcag gtgctgcatt gcggggatga gtccatgctg
 1740
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 1800
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 1860
 ctggcccaca gctccatgga cttctgagcc gacagtcttc cttctctctc aagaggcctc
 1920
 agtccccaag actgccacca gtctacacat acagcagccc cctggacaga atcagcattt
 1980
 cagctcagct ggcctggaat gggccaggct ggtcctggct gcctgttccc tgtgctcttc
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 2155

<210> 5286

<211> 628

<212> PRT

<213> Homo sapiens

<400> 5286

Xaa	Arg	Val	Gln	Gln	Arg	Met	Glu	Glu	Ser	Glu	Pro	Glu	Arg	Lys	Arg
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Ala	Arg	Thr	Asp	Glu	Val	Pro	Ala	Gly	Gly	Ser	Arg	Ser	Glu	Ala	Glu
			20					25					30		
Asp	Glu	Asp	Asp	Glu	Asp	Tyr	Val	Pro	Tyr	Val	Pro	Leu	Arg	Gln	Arg
		35				40					45				
Arg	Gln	Leu	Leu	Leu	Gln	Lys	Leu	Leu	Gln	Arg	Arg	Arg	Lys	Gly	Ala
		50				55					60				
Ala	Glu	Glu	Glu	Gln	Gln	Asp	Ser	Gly	Ser	Glu	Pro	Arg	Gly	Asp	Glu
65				70					75					80	
Asp	Asp	Ile	Pro	Leu	Gly	Pro	Gln	Ser	Asn	Val	Ser	Leu	Leu	Asp	Gln
			85					90						95	
His	Gln	His	Leu	Lys	Glu	Lys	Ala	Glu	Ala	Arg	Lys	Glu	Ser	Ala	Lys

100 105 110
 Glu Lys Gln Leu Lys Glu Glu Glu Lys Ile Leu Glu Ser Val Ala Glu
 115 120 125
 Gly Arg Ala Leu Met Ser Val Lys Glu Met Ala Lys Gly Ile Thr Tyr
 130 135 140
 Asp Asp Pro Ile Lys Thr Ser Trp Thr Pro Pro Arg Tyr Val Leu Ser
 145 150 155 160
 Met Ser Glu Glu Arg His Glu Arg Val Arg Lys Lys Tyr His Ile Leu
 165 170 175
 Val Glu Gly Asp Gly Ile Pro Pro Pro Ile Lys Ser Phe Lys Glu Met
 180 185 190
 Lys Phe Pro Ala Ala Ile Leu Arg Gly Leu Lys Lys Lys Gly Ile His
 195 200 205
 His Pro Thr Pro Ile Gln Ile Gln Gly Ile Pro Thr Ile Leu Ser Gly
 210 215 220
 Arg Asp Met Ile Gly Ile Ala Phe Thr Gly Ser Gly Lys Thr Leu Val
 225 230 235 240
 Phe Thr Leu Pro Val Ile Met Phe Cys Leu Glu Gln Glu Lys Arg Leu
 245 250 255
 Pro Phe Ser Lys Arg Glu Gly Pro Tyr Gly Leu Ile Ile Cys Pro Ser
 260 265 270
 Arg Glu Leu Ala Arg Gln Thr His Gly Ile Leu Glu Tyr Tyr Cys Arg
 275 280 285
 Leu Leu Gln Glu Asp Ser Ser Pro Leu Leu Arg Cys Ala Leu Cys Ile
 290 295 300
 Gly Gly Met Ser Val Lys Glu Gln Met Glu Thr Ile Arg His Gly Val
 305 310 315 320
 His Met Met Val Ala Thr Pro Gly Arg Leu Met Asp Leu Leu Gln Lys
 325 330 335
 Lys Met Val Ser Leu Asp Ile Cys Arg Tyr Leu Ala Leu Asp Glu Ala
 340 345 350
 Asp Arg Met Ile Asp Met Gly Phe Glu Gly Asp Ile Arg Thr Ile Phe
 355 360 365
 Ser Tyr Phe Lys Gly Gln Arg Gln Thr Leu Leu Phe Ser Ala Thr Met
 370 375 380
 Pro Lys Lys Ile Gln Asn Phe Ala Lys Ser Ala Leu Val Lys Pro Val
 385 390 395 400
 Thr Ile Asn Val Gly Arg Ala Gly Ala Ala Ser Leu Asp Val Ile Gln
 405 410 415
 Glu Val Glu Tyr Val Lys Glu Glu Ala Lys Met Val Tyr Leu Leu Glu
 420 425 430
 Cys Leu Gln Lys Thr Pro Pro Pro Val Leu Ile Phe Ala Glu Lys Lys
 435 440 445
 Ala Asp Val Asp Ala Ile His Glu Tyr Leu Leu Leu Lys Gly Val Glu
 450 455 460
 Ala Val Ala Ile His Gly Gly Lys Asp Gln Glu Glu Arg Thr Lys Ala
 465 470 475 480
 Ile Glu Ala Phe Arg Glu Gly Lys Lys Asp Val Leu Val Ala Thr Asp
 485 490 495
 Val Ala Ser Lys Gly Leu Asp Phe Pro Ala Ile Gln His Val Ile Asn
 500 505 510
 Tyr Asp Met Pro Glu Glu Ile Glu Asn Tyr Val His Arg Ile Gly Arg
 515 520 525
 Thr Gly Arg Ser Gly Asn Thr Gly Ile Ala Thr Thr Phe Ile Asn Lys

530 535 540
 Ala Cys Asp Glu Ser Val Leu Met Asp Leu Lys Ala Leu Leu Leu Glu
 545 550 555 560
 Ala Lys Gln Lys Val Pro Pro Val Leu Gln Val Leu His Cys Gly Asp
 565 570 575
 Glu Ser Met Leu Asp Ile Gly Gly Glu Arg Gly Cys Ala Phe Cys Gly
 580 585 590
 Gly Leu Gly His Arg Ile Thr Asp Cys Pro Lys Leu Glu Ala Met Gln
 595 600 605
 Thr Lys Gln Val Ser Asn Ile Gly Arg Lys Asp Tyr Leu Ala His Ser
 610 615 620
 Ser Met Asp Phe
 625

<210> 5287
 <211> 581
 <212> DNA
 <213> Homo sapiens

<400> 5287
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 120
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 180
 ggaggcatta tggcccccaa agacataatg acaaatactc atgctaaatc catcctcaat
 240
 tcaatgaact ccctcaggaa gagcaatacc ctctgtgatg tgacattgag agtagagcag
 300
 aaagaacttc ctgcccacgc gattgtgctg gctgcctgta gtgattactt ctgtgccatg
 360
 ttcactagtg agctctcaga gaaggggaaa ctttatgttg acatccaagg tttgactgcc
 420
 tctaccatgg aaattttatt ggactttgtg tacacagaaa cggtagatgt gacagtggag
 480
 aatgtacaag aactgcttcc tgcagcctgt ctgcttcagt tgaaagggtg gaaacaagcc
 540
 tgctgtgagt tcttagaaag tcagttggac ctttcacgcg t
 581

<210> 5288
 <211> 193
 <212> PRT
 <213> Homo sapiens

<400> 5288
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 1 5 10 15
 Glu Pro Pro Ala Ser Pro Ala Pro His Ser Ile Pro Thr Gly Trp Gly
 20 25 30
 Arg Ala Arg Cys Gly Cys Val Gly Ser Gly Ala Glu Leu Gln Asn Pro
 35 40 45
 Arg Thr His Phe Val Leu Ser Pro His Cys Phe Met Gly Gly Ile Met

50 55 60
 Ala Pro Lys Asp Ile Met Thr Asn Thr His Ala Lys Ser Ile Leu Asn
 65 70 75 80
 Ser Met Asn Ser Leu Arg Lys Ser Asn Thr Leu Cys Asp Val Thr Leu
 85 90 95
 Arg Val Glu Gln Lys Asp Phe Pro Ala His Arg Ile Val Leu Ala Ala
 100 105 110
 Cys Ser Asp Tyr Phe Cys Ala Met Phe Thr Ser Glu Leu Ser Glu Lys
 115 120 125
 Gly Lys Pro Tyr Val Asp Ile Gln Gly Leu Thr Ala Ser Thr Met Glu
 130 135 140
 Ile Leu Leu Asp Phe Val Tyr Thr Glu Thr Val His Val Thr Val Glu
 145 150 155 160
 Asn Val Gln Glu Leu Leu Pro Ala Ala Cys Leu Leu Gln Leu Lys Gly
 165 170 175
 Val Lys Gln Ala Cys Cys Glu Phe Leu Glu Ser Gln Leu Asp Pro Ser
 180 185 190
 Arg

<210> 5289
 <211> 361
 <212> DNA
 <213> Homo sapiens

<400> 5289
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 agcactatgg gaagttatgc tcagctatta taggactatg gaatggcatg aaaagcatga
 120
 caatgaggat actgcttcag cttctgaagg ggaagtatat gatagggtcc tgaagaaact
 180
 tattttgatc ggggctacat taaaaaagaa attagaacat ggacttacac gaatatggca
 240
 ggatgttcag ctaaaagtaa aaacctactt gcttggaact gatttgtcta tattcaaata
 300
 tgatgatttc atctttgttt tggatataat cagcagggtg atgcaagttg gagaagaatt
 360
 c
 361

<210> 5290
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 5290
 Met Leu Ser Tyr Tyr Arg Thr Met Glu Trp His Glu Lys His Asp Asn
 1 5 10 15
 Glu Asp Thr Ala Ser Ala Ser Glu Gly Glu Val Tyr Asp Arg Val Leu
 20 25 30
 Lys Lys Leu Ile Leu Ile Gly Ala Thr Leu Lys Lys Lys Leu Glu His
 35 40 45
 Gly Leu Thr Arg Ile Trp Gln Asp Val Gln Leu Lys Val Lys Thr Tyr

50		55		60	
Leu	Leu	Gly	Thr	Asp	Leu
					Ser
					Ile
					Phe
					Lys
					Tyr
					Asp
					Asp
					Phe
					Ile
					Phe
65		70		75	80
Val	Leu	Asp	Ile	Ile	Ser
					Arg
					Leu
					Met
					Gln
					Val
					Gly
					Glu
					Glu
					Phe
		85		90	95

<210> 5291
 <211> 767
 <212> DNA
 <213> Homo sapiens

<400> 5291
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 aagatggcca cgcagaagac tcccagcagg gcgtacatgc ccagctctag ctcaagtaca
 120
 tgctgagggg cagggacat ctctcctcc tcttcctct cctccctggc ttggtctcc
 180
 tccttctctg cctcctctcc tgcccgctca aacttgcccc tcacacctgt gttgccccg
 240
 aactgctg ccacctgccg ttaccaccc atggtggctt ctgtggctgg tgggtccaa
 300
 gcagggtgg atggggagag caggggctgg agtggaggca gggggcagcc ccaccaggc
 360
 ggtgccagag gccaaaggca cacggtggcg gccccggcn gcagggtcg ggcgggtgca
 420
 gagccacatg cagcggcagc ccctcggcg ctgccccact caccaccacc ccgagctggg
 480
 caccctgctc ctcaagtggc aggatggcac caggctcctc ggctgaaacg gacagtccca
 540
 gtcaggcggc cgtagagctc agctgggcca cagtgtgatc agagaaggac agccataggg
 600
 agagggccac ctctgtggg gcacacagac acaggcagag acatgagagg gcacgcacgc
 660
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 720
 cagagacaca ggcagataga caaacacag ggagagaggg gacgcgt
 767

<210> 5292
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 5292
 Gly Ala Gly Thr Ile Ser Ser Ser Ser Ser Ser Ser Ser Leu Ala Leu
 1 5 10 15
 Val Ser Ser Phe Leu Ala Ser Ser Ser Ala Arg Ser Asn Leu Pro Leu
 20 25 30
 Thr Pro Val Leu Pro Pro Thr Leu Pro Ala Thr Cys Arg Leu Pro Pro
 35 40 45
 Met Val Ala Ser Val Ala Gly Gly Leu Gln Ala Gly Leu Asp Gly Glu
 50 55 60
 Ser Arg Gly Trp Ser Gly Gly Arg Gly Gln Pro His Pro Gly Gly Ala

65					70					75				80
Arg	Gly	Gln	Arg	His	Thr	Val	Ala	Ala	Pro	Ala	Xaa	Arg	Ala	Arg
				85					90				95	
Gly	Ala	Glu	Pro	His	Ala	Ala	Ala	Ala	Pro	Arg	Arg	Leu	Pro	His
			100				105					110		
Pro	Pro	Pro	Arg	Ala	Gly	His	Pro	Ala	Pro	Gln	Leu	Ala	Gly	Trp
		115				120					125			
Gln	Ala	Pro	Arg	Leu	Lys	Arg	Thr	Val	Pro	Val	Arg	Arg	Ser	
	130					135					140			

<210> 5293
 <211> 1428
 <212> DNA
 <213> Homo sapiens

<400> 5293
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 120
 gcttcactgt tgctcttggc aacatccact tccgggagcg agtgccgttt cccccgtca
 180
 ccgcgggcta gggagcgtgg gattccggac tgtgagcggc tgtagtgcg tcgcagctgc
 240
 tggcgatccg gcgaccctcg gccggcagga cccgcgggcc acgcagccgg ggccttctca
 300
 acgcctcagt acctcggcgg gaccgccatg gttctgctgc acgtgaagcg gggcgacgag
 360
 agccagttcc tgctgcaggc gcctgggagt accgagctgg aggagctcac ggtgcaggtg
 420
 gcccggtct ataatggcg gctcaaggcg cagcgctct gctcagaaat ggaagaatta
 480
 gccgaacatg gcatatttct cctcctaata atgcaaggac tgaccgatga tcagattgaa
 540
 gaattgaaat tgaaggatga atggggtgaa aaatgcgtac ccagcggagg tgcagtgttt
 600
 aaaaaggatg atattggacg aaggaatggg caagctcaa atgagaagat gaagcaagtg
 660
 ttaaagaaga ctatagaaga agccaaggca ataatatcta agaaacaagt ggaagccggt
 720
 gtctgtgtta ccatggagat ggtgaaagat gccttggacc agcttcgagg cgcggtgatg
 780
 attgtttacc ccatggggtt gccaccgtat gatcccatcc gcatggagtt tgaaaataag
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 900
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 960
 gaaaaaacca aaattatcgc caagattcag caaaggggac agggagctcc agcccagag
 1020
 cctattatta gcagtgagga gcagaagcag ctgatgctgt actatcacag aagacaagag
 1080
 gagctcaaga gattggaaga aaatgatgat gatgcctatt taaactcacc atgggcggat
 1140

aacactgctt tgaaaagaca ttttcatgga gtgaaagaca taaagtgagg accaagatga
 1200
 agttcaccag ctgatgacac ttccaaagag attagctcac ctttctccta ggcaattata
 1260
 atttaaaaaa aaaaaaaagg ccacttactg ccctctgtaa aagatgttaa cttttctagt
 1320
 tttcttttag tgtgaatttt taaaatagca gttattcaag gttttagaac ttaataaata
 1380
 cctagtcaga agaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa
 1428

<210> 5294

<211> 290

<212> PRT

<213> Homo sapiens

<400> 5294

Met	Val	Leu	Leu	His	Val	Lys	Arg	Gly	Asp	Glu	Ser	Gln	Phe	Leu	Leu
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Gln	Ala	Pro	Gly	Ser	Thr	Glu	Leu	Glu	Glu	Leu	Thr	Val	Gln	Val	Ala
			20					25					30		
Arg	Val	Tyr	Asn	Gly	Arg	Leu	Lys	Val	Gln	Arg	Leu	Cys	Ser	Glu	Met
		35					40					45			
Glu	Glu	Leu	Ala	Glu	His	Gly	Ile	Phe	Leu	Pro	Pro	Asn	Met	Gln	Gly
		50				55					60				
Leu	Thr	Asp	Asp	Gln	Ile	Glu	Glu	Leu	Lys	Leu	Lys	Asp	Glu	Trp	Gly
65				70					75					80	
Glu	Lys	Cys	Val	Pro	Ser	Gly	Gly	Ala	Val	Phe	Lys	Lys	Asp	Asp	Ile
			85					90					95		
Gly	Arg	Arg	Asn	Gly	Gln	Ala	Pro	Asn	Glu	Lys	Met	Lys	Gln	Val	Leu
			100					105					110		
Lys	Lys	Thr	Ile	Glu	Glu	Ala	Lys	Ala	Ile	Ile	Ser	Lys	Lys	Gln	Val
		115					120					125			
Glu	Ala	Gly	Val	Cys	Val	Thr	Met	Glu	Met	Val	Lys	Asp	Ala	Leu	Asp
		130				135				140					
Gln	Leu	Arg	Gly	Ala	Val	Met	Ile	Val	Tyr	Pro	Met	Gly	Leu	Pro	Pro
145				150					155					160	
Tyr	Asp	Pro	Ile	Arg	Met	Glu	Phe	Glu	Asn	Lys	Glu	Asp	Leu	Ser	Gly
			165					170					175		
Thr	Gln	Ala	Gly	Leu	Asn	Val	Ile	Lys	Glu	Ala	Glu	Ala	Gln	Leu	Trp
		180						185					190		
Trp	Ala	Ala	Lys	Glu	Leu	Arg	Arg	Thr	Lys	Lys	Leu	Ser	Asp	Tyr	Val
		195					200					205			
Gly	Lys	Asn	Glu	Lys	Thr	Lys	Ile	Ile	Ala	Lys	Ile	Gln	Gln	Arg	Gly
		210				215					220				
Gln	Gly	Ala	Pro	Ala	Arg	Glu	Pro	Ile	Ile	Ser	Ser	Glu	Glu	Gln	Lys
225				230					235					240	
Gln	Leu	Met	Leu	Tyr	Tyr	His	Arg	Arg	Gln	Glu	Glu	Leu	Lys	Arg	Leu
			245					250					255		
Glu	Glu	Asn	Asp	Asp	Ala	Tyr	Leu	Asn	Ser	Pro	Trp	Ala	Asp	Asn	
		260					265					270			
Thr	Ala	Leu	Lys	Arg	His	Phe	His	Gly	Val	Lys	Asp	Ile	Lys	Trp	Arg
		275				280						285			

Pro Arg

290

<210> 5295

<211> 1451

<212> DNA

<213> Homo sapiens

<400> 5295

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120
gacagtaacg agcagtgtcg gccgggcccc actttcagag ggggcggaag ggcattctga
180
cacgtgtcat atggtaagag gcgcattccac tcacccaggc ctggtgcagg actctgcaag
240
gccctcctga gtaaagagtg gccacgaagg gctgctaggc agcacctact cttggaatca
300
agcagggaag aagtgcagaa ttggagctgg cgggaggtgt gtgtgcctgc cccacagatg
360
gctgtggtga gccacaaagc accaagattc tgttcttcat tcagcaacca cccatgagcc
420
tcctgcttta ttccaatcgc atggcaccag cctgaaaacc tctctccctt ctgagaggaa
480
tgctggaatg aactccact ctgcccctcc ctccctcctt ccttgctcag ggtccatgtg
540
aacagcaggc cattgttggg aagtgcctgt tgcagtcatt cttacacccc cacagccact
600
gccccacaca cccactggtg gctaccaagg cccgtcaata gatcttgtgt ccaccgagcc
660
ctgggtgcca ggtccagcag ccagacaggc tgaagggtcc ctccctgcat cacagagtag
720
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780
gacctgttcc ttacaggtgt caagggtgga gggctcctggg tcctccatga cctggggggg
840
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900
aagctcatcc tgggtgaggg ggttcaagtt aaaacccttc agctccgggt tgcttggggc
960
ctcaaaaagg cggttgacct tcactttaag ttgcttccgc agtttttcta tttctttatc
1020
cagatgatct tgatcttttt caatcatttc ctttgtctca gggtgaggca tcttgataaa
1080
catgttcccg aagcaaacca tcacatcttc agagaggctg agatccttct gcagggccct
1140
caggccctct cgattctgat tccttttagt gtccaggctc acaatctgcc gcttgtccgc
1200
cagcacctcc tcggcgagct cctccacttc tacaaggtag cgcagcactc gctctgcctc
1260
gggtgatagc atagcgccca ccaactccgc ttgcggctct cgcgcgaccc cgggatctcc
1320
gcttcgggaa catgtttatc aagatgcctc accctgagac aaaggaaatg attgaaaaag
1380

atcaagatca tctggataaa gaaatagaaa aactgcggaa gcaacttaaa gtgaagggtcc
 1440
 ccttcacgcg t
 1451

<210> 5296
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 5296
 Met Leu Ser Pro Glu Ala Glu Arg Val Leu Arg Tyr Leu Val Glu Val
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 Glu Glu Leu Ala Glu Glu Val Leu Ala Asp Lys Arg Gln Ile Val Asp
 20 25 30
 Leu Asp Thr Lys Arg Asn Gln Asn Arg Glu Gly Leu Arg Ala Leu Gln
 35 40 45
 Lys Asp Leu Ser Leu Ser Glu Asp Val Met Val Cys Phe Gly Asn Met
 50 55 60
 Phe Ile Lys Met Pro His Pro Glu Thr Lys Glu Met Ile Glu Lys Asp
 65 70 75 80
 Gln Asp His Leu Asp Lys Glu Ile Glu Lys Leu Arg Lys Gln Leu Lys
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 Val Lys Val Asn Arg Leu Phe Glu Ala Gln Gly Lys Pro Glu Leu Lys
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 35 40 45
 Leu Ala Ser Leu Ser Ala Glu Glu Leu Lys Glu Leu Glu Arg Glu Leu
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 Glu Asp Ile Glu Pro Asp Arg Asn Leu Pro Val Gly Leu Arg Gln Lys
 65 70 75 80
 Ser Leu Thr Glu Lys Thr Pro Thr Gly Thr Phe Ser Arg Glu Ala Leu
 85 90 95
 Met Ala Tyr Trp Glu Lys Glu Ser Gln Lys Leu Leu Glu Lys Glu Arg
 100 105 110
 Leu Gly Glu Cys Gly Lys Val Ala Glu Asp Lys Glu Glu Ser Glu Glu
 115 120 125
 Glu Leu Ile Phe Thr Glu Ser Asn Ser Glu Val Ser Glu Glu Val Tyr
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 Ser Asp Glu Glu Glu Arg Thr Ile
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<210> 5535
 <211> 1887
 <212> DNA
 <213> Homo sapiens

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 355 360 365
 Arg Asp Tyr Phe Val Lys Ala Gly Ser Ile Arg Gly Arg Gly Arg Gly
 370 375 380
 Ala Ala Gly Asn Arg Ala Pro Gly Pro Arg Gly Ser Tyr Leu Gly Gly
 385 390 395 400
 Tyr Ser Ala Gly Arg Gly Ile Tyr Ser Arg Tyr His Glu Gly Lys Gly
 405 410 415
 Lys Gln Gln Glu Lys Gly Tyr Glu Leu Val Pro Asn Leu Glu Ile Pro
 420 425 430
 Thr Val Asn Pro Val Ala Ile Lys Pro Gly Thr Val Ala Ile Pro Ala
 435 440 445
 Ile Gly Ala Gln Tyr Ser Met Phe Pro Ala Ala Pro Ala Pro Lys Met
 450 455 460
 Ile Glu Asp Gly Lys Ile His Thr Val Glu His Met Ile Ser Pro Ile
 465 470 475 480
 Ala Val Gln Pro Asp Pro Ala Ser Ala Ala Ala Ala Ala Ala Ala
 485 490 495
 Ala Ala Ala Ala Ala Val Ile Pro Thr Val Ser Thr Pro Pro Pro
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 Phe Gln Gly Arg Pro Ile Thr Pro Val Tyr Thr Val Ala Pro Asn Val
 515 520 525
 Gln Arg Ile Pro Thr Ala Gly Ile Tyr Gly Ala Ser Tyr Val Pro Phe
 530 535 540
 Ala Ala Pro Ala Thr Ala Thr Ile Ala Thr Leu Gln Lys Asn Ala Ala
 545 550 555 560
 Ala Ala Ala Ala Val Tyr Gly Gly Tyr Ala Gly Tyr Ile Pro Gln Ala
 565 570 575
 Phe Pro Ala Ala Ala Ile Gln Val Pro Ile Pro Asp Val Tyr Gln Thr
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 Tyr

<210> 5533

<211> 505

<212> DNA

<213> Homo sapiens

<400> 5533

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<210> 5532
 <211> 593
 <212> PRT
 <213> Homo sapiens

<400> 5532
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 35 40 45
 Glu Asn Gly Gln Arg Lys Tyr Gly Gly Pro Pro Pro Gly Trp Glu Gly
 50 55 60
 Pro His Pro Gln Arg Gly Cys Glu Val Phe Val Gly Lys Ile Pro Arg
 65 70 75 80
 Asp Val Tyr Glu Asp Glu Leu Val Pro Val Phe Glu Ala Val Gly Arg
 85 90 95
 Ile Tyr Glu Leu Arg Leu Met Met Asp Phe Asp Gly Lys Asn Arg Gly
 100 105 110
 Tyr Ala Phe Val Met Tyr Cys His Lys His Glu Ala Lys Arg Ala Val
 115 120 125
 Arg Glu Leu Asn Asn Tyr Glu Ile Arg Pro Gly Arg Leu Leu Gly Val
 130 135 140
 Cys Cys Ser Val Asp Asn Cys Arg Leu Phe Ile Gly Gly Ile Pro Lys
 145 150 155 160
 Met Lys Lys Arg Glu Ile Leu Glu Glu Ile Ala Lys Val Thr Glu
 165 170 175
 Gly Val Leu Asp Val Ile Val Tyr Ala Ser Ala Ala Asp Lys Met Lys
 180 185 190
 Asn Arg Gly Phe Ala Phe Val Glu Tyr Glu Ser His Arg Ala Ala Ala
 195 200 205
 Met Ala Arg Arg Lys Leu Met Pro Gly Arg Ile Gln Leu Trp Gly His
 210 215 220
 Gln Ile Ala Val Asp Trp Ala Glu Pro Glu Ile Asp Val Asp Glu Asp
 225 230 235 240
 Val Met Glu Thr Val Lys Ile Leu Tyr Val Arg Asn Leu Met Ile Glu
 245 250 255
 Thr Thr Glu Asp Thr Ile Lys Lys Ser Phe Gly Gln Phe Asn Pro Gly
 260 265 270
 Cys Val Glu Arg Val Lys Lys Ile Arg Asp Tyr Ala Phe Val His Phe
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 Thr Ser Arg Glu Asp Ala Val His Ala Met Asn Asn Leu Asn Gly Thr
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 Glu Leu Glu Gly Ser Cys Leu Glu Val Thr Leu Ala Lys Pro Val Asp
 305 310 315 320
 Lys Glu Gln Tyr Ser Arg Tyr Gln Lys Ala Ala Arg Gly Gly Gly Ala
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2880
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<210> 5531
 <211> 3056
 <212> DNA
 <213> Homo sapiens

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4709

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<210> 5530

<211> 603

<212> PRT

<213> Homo sapiens

<400> 5530

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Arg	Leu	Leu	Ser	Cys	Pro	Gly	Thr	Val	Ala	Lys	Asp	Leu	Arg	Arg	Asp
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Glu	Gln	Pro	Ser	Gly	Ser	Val	Glu	Thr	Gly	Phe	Glu	Asp	Lys	Ile	Pro
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Lys	Arg	Arg	Phe	Ser	Glu	Met	Gln	Asn	Glu	Arg	Arg	Glu	Gln	Ala	Gln
			85					90						95	
Arg	Thr	Val	Leu	Ile	His	Cys	Pro	Glu	Lys	Ile	Ser	Glu	Asn	Lys	Phe
			100					105					110		
Leu	Lys	Tyr	Leu	Ser	Gln	Phe	Gly	Pro	Ile	Asn	Asn	His	Phe	Phe	Tyr
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Glu	Ser	Phe	Gly	Leu	Tyr	Ala	Val	Val	Glu	Phe	Cys	Gln	Lys	Glu	Ser
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Ile	Gly	Ser	Leu	Gln	Asn	Gly	Thr	His	Thr	Pro	Ser	Thr	Ala	Met	Glu

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<210> 5528
 <211> 176
 <212> PRT
 <213> Homo sapiens

<400> 5528
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 35 40 45
 Tyr Leu Ala Thr Val Gln Ala Ile Ala Leu Gly Thr Arg Phe Ile Ile
 50 55 60
 Glu Ala Met Glu Ala Ala Gly His Ser Ile Ser Thr Leu Phe Leu Cys
 65 70 75 80
 Gly Gly Leu Ser Lys Asn Pro Leu Phe Val Gln Met His Ala Asp Ile
 85 90 95
 Thr Gly Met Pro Val Val Leu Ser Gln Glu Val Glu Ser Val Leu Val
 100 105 110
 Gly Ala Ala Val Leu Gly Ala Cys Ala Ser Gly Asp Phe Ala Ser Val
 115 120 125
 Gln Glu Ala Met Ala Lys Met Ser Lys Val Gly Lys Val Val Phe Pro
 130 135 140
 Arg Leu Gln Asp Lys Lys Tyr Tyr Asp Lys Lys Tyr Gln Val Phe Leu
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<210> 5529
 <211> 2602
 <212> DNA
 <213> Homo sapiens

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<210> 5526
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 5526
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 35 40 45
 Glu Ile Thr Gln Leu Glu Ser Trp Glu Glu Pro Phe Met Pro Ala Trp
 50 55 60
 Glu Val Val Thr Ser Ala Ile Pro Arg Glu Thr Leu Arg Met Ala Phe
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 Arg Gln Asp Glu Asn Ser
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<210> 5527
 <211> 728
 <212> DNA
 <213> Homo sapiens

<400> 5527
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 965 970 975
 Pro Thr Ala Ser Ala Leu Ser Thr Gly Ser Pro Pro Met Lys Asn Pro
 980 985 990
 Ser His Pro Thr Ala Ser Ala Leu Ser Thr Gly Ser Pro Pro Met Lys
 995 1000 1005
 Asn Pro Ser His Pro Thr Ala Ser Thr Leu Ser Met Gly Leu Pro Pro
 1010 1015 1020
 Ser Arg Thr Pro Ser His Pro Thr Ala Thr Val Leu Ser Thr Gly Ser
 1025 1030 1035 1040
 Pro Pro Ser Glu Ser Pro Ser Arg Thr Gly Ser Ala Ala Ser Gly Ser
 1045 1050 1055
 Ser Asp Ser Ser Ile Tyr Leu Thr Ser Ser Val Tyr Ser Ser Lys Ile
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 1075 1080 1085
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 1090 1095 1100
 Glu Arg Ile Leu Met Thr Tyr Gln Val Pro Glu Arg Val Lys Glu Val
 1105 1110 1115 1120
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 1125 1130 1135
 Pro Gln Phe Ser His Gly Gln Lys Glu Glu Leu Ala Lys Val Tyr Asn
 1140 1145 1150
 Trp Ile Gln Ser Gln Thr Val Thr Gln Glu Ile Asp Ile Gln Ala Cys
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 1170 1175 1180
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<210> 5525

<211> 761

<212> DNA

<213> Homo sapiens

<400> 5525

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 420

Tyr Thr Glu Pro Cys Glu Asp Leu Arg Asn Asp Glu His Ser Pro Ser
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 Tyr Gln Gln Ile Asn Cys Ile Asp Ser Val Ile Arg Tyr Leu Lys Ser
 530 535 540
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 660
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 780
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 804

<210> 5518
 <211> 85
 <212> PRT
 <213> Homo sapiens

<400> 5518
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 Glu Leu Ser Ser Val Leu Tyr Cys Cys Asp Leu Leu Ile Gly Ile Gly
 20 25 30
 Ile Val Val Gly Ser Ser Asp Arg Ile Arg Ala Ser Ser Leu Gln Val
 35 40 45
 Gln Lys Gln Phe Lys Thr Leu Met Ile Ala Leu Gln Gln Pro Thr His
 50 55 60
 Gly Asp Met Val Ile Val Pro Thr Cys Cys Ser Val Ile Cys Arg Ala
 65 70 75 80
 Ser Asp Trp Phe Lys

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                165                170                175
Pro Cys Val Leu Gln Arg Ala Gly Pro Leu Pro Gly Lys Asp Ile Pro
                180                185                190
Leu Pro Val Thr Val Gln Arg Thr Pro Leu Asn Trp Lys Glu Leu Asp
                195                200                205
Ser Ser Leu Leu Phe Ser Glu Ala Ala Thr Gly Glu Glu Ser Leu Leu
                210                215                220
Ser Glu Gly Leu Arg Glu Ser Leu Ser Phe Tyr Ile Ser Leu Asn Asp
225                230                235                240
Glu Ala Val Ser Leu Asp Asp Ala
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<210> 5515

<211> 420

<212> DNA

<213> Homo sapiens

<400> 5515

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<210> 5516

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5516

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20                25                30
Arg Gln Lys Lys Leu Glu Met Glu Lys Leu Gln Leu Gln Ala Leu Glu
35                40                45
Gln Glu His Lys Lys Leu Ala Ala Arg Leu Glu Glu Arg Gly Lys
50                55                60
Asn Lys Gln Val Val Leu Met Leu Val Lys Glu Cys Lys Gln Leu Ser
65                70                75                80
Ser Lys Val Ile Glu Glu Ala Gln Lys Leu Glu Asp Val Met Ala Lys
85                90                95
Leu Ala Ser Ser Leu Cys His Gln His Leu Leu His Ser Leu Ser Gly
100                105                110
Val Pro Gly Thr Gly His Ile Asp

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<210> 5514

<211> 248

<212> PRT

<213> Homo sapiens

<400> 5514

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 Gly Gly Pro Ala Glu Leu Ser Leu Arg Leu Gly Glu Pro Leu Thr Ile
 35 40 45
 Val Ser Glu Asp Gly Asp Trp Trp Thr Val Leu Ser Glu Val Ser Gly
 50 55 60
 Arg Glu Tyr Asn Ile Pro Ser Val His Val Ala Lys Val Ser His Gly
 65 70 75 80
 Trp Leu Tyr Glu Gly Leu Ser Arg Glu Lys Ala Glu Asp Leu Leu Leu
 85 90 95
 Leu Pro Gly Asn Pro Gly Gly Ala Phe Leu Ile Arg Glu Ser Gln Thr
 100 105 110
 Arg Arg Gly Ser Tyr Ser Leu Ser Val Arg Leu Ser Arg Pro Ala Ser
 115 120 125
 Trp Asp Arg Ile Arg His Tyr Arg Ile His Cys Leu Asp Asn Gly Trp
 130 135 140
 Leu Tyr Ile Ser Pro Arg Leu Thr Phe Pro Ser Leu Gln Ala Leu Val
 145 150 155 160
 Asp His Tyr Ser Glu Leu Ala Asp Asp Ile Cys Cys Leu Leu Lys Glu

435 440 445

<210> 5509
 <211> 818
 <212> DNA
 <213> Homo sapiens

<400> 5509
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 818

<210> 5510
 <211> 105
 <212> PRT
 <213> Homo sapiens .

<400> 5510
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 35 40 45
 Tyr Pro Ser Thr Glu Arg His Ile Arg Asp Arg Leu Gly Arg Lys Pro
 50 55 60
 Cys Glu Tyr Gln Glu Cys Arg Gln Lys Ala Tyr Thr Cys Lys Pro Cys
 65 70 75 80
 Gly Asn Ala Phe Arg Phe His His Ser Phe His Ile His Glu Arg Pro

1	5	10	15
Leu Asp Pro Tyr Thr Glu Leu Arg Lys Gln Pro Leu Arg Lys Tyr Val			
20	25	30	
Thr Pro Ser Asp Phe Asp Gln Leu Lys Gln Phe Leu Thr Phe Asp Lys			
35	40	45	
Gln Val Leu Arg Phe Tyr Ala Ile Trp Asp Asp Thr Asp Ser Met Tyr			
50	55	60	
Gly Glu Cys Arg Thr Tyr Ile Ile His Tyr Tyr Leu Met Asp Asp Thr			
65	70	75	80
Val Glu Ile Arg Glu Val His Glu Arg Asn Asp Gly Arg Asp Pro Phe			
85	90	95	
Pro Leu Leu Met Asn Arg Gln Arg Val Pro Lys Val Leu Val Glu Asn			
100	105	110	
Ala Lys Asn Phe Pro Gln Cys Val Leu Glu Ile Ser Asp Gln Glu Val			
115	120	125	
Leu Glu Trp Tyr Thr Ala Lys Asp Phe Ile Val Gly Lys Ser Leu Thr			
130	135	140	
Ile Leu Gly Arg Thr Phe Phe Ile Tyr Asp Cys Asp Pro Phe Thr Arg			
145	150	155	160
Arg Tyr Tyr Lys Glu Lys Phe Gly Ile Thr Asp Leu Pro Arg Ile Asp			
165	170	175	
Val Ser Lys Arg Glu Pro Pro Pro Val Lys Gln Glu Leu Pro Pro Tyr			
180	185	190	
Asn Gly Phe Gly Leu Val Glu Asp Ser Ala Gln Asn Cys Phe Ala Leu			
195	200	205	
Ile Pro Lys Ala Pro Lys Lys Asp Val Ile Lys Met Leu Val Asn Asp			
210	215	220	
Asn Lys Val Leu Arg Tyr Leu Ala Val Leu Glu Ser Pro Ile Pro Glu			
225	230	235	240
Asp Lys Asp Arg Arg Phe Val Phe Ser Tyr Phe Leu Ala Thr Asp Met			
245	250	255	
Ile Ser Ile Phe Glu Pro Pro Val Arg Asn Ser Gly Ile Ile Gly Gly			
260	265	270	
Lys Tyr Leu Gly Arg Thr Lys Val Val Lys Pro Tyr Ser Thr Val Asp			
275	280	285	
Asn Pro Val Tyr Tyr Gly Pro Ser Asp Phe Phe Ile Gly Ala Val Ile			
290	295	300	
Glu Val Phe Gly His Arg Phe Ile Ile Leu Asp Thr Asp Glu Tyr Val			
305	310	315	320
Leu Lys Tyr Met Glu Ser Asn Ala Ala Gln Tyr Ser Pro Glu Ala Leu			
325	330	335	
Ala Ser Ile Gln Asn His Val Arg Lys Arg Glu Ala Pro Ala Pro Glu			
340	345	350	
Ala Glu Ser Lys Gln Thr Glu Lys Asp Pro Gly Val Gln Glu Leu Glu			
355	360	365	
Ala Leu Ile Asp Thr Ile Gln Lys Gln Leu Lys Asp His Ser Cys Lys			
370	375	380	
Asp Asn Ile Arg Glu Ala Phe Gln Ile Tyr Asp Lys Glu Ala Ser Gly			
385	390	395	400
Tyr Val Asp Arg Asp Met Phe Phe Lys Ile Cys Glu Ser Leu Asn Val			
405	410	415	
Pro Val Asp Asp Ser Leu Val Lys Glu Leu Ile Arg Met Cys Ser His			
420	425	430	
Gly Glu Gly Lys Ile Asn Tyr Tyr Asn Phe Val Arg Ala Phe Ser Asn			

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1658

<210> 5508

<211> 448

<212> PRT

<213> Homo sapiens

<400> 5508

Xaa Leu Glu Ser Gln Gly Ile Glu Leu Asn Pro Pro Glu Lys Met Ala

<400> 5506

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 35 40 45
 Arg Gln Leu Leu Leu Asn Cys Arg Leu Val Cys Ser Leu Trp Arg Asp
 50 55 60
 Leu Ile Asp Leu Val Thr Leu Trp Lys Arg Lys Cys Leu Arg Glu Gly
 65 70 75 80
 Phe Ile Thr Glu Asp Trp Asp Gln Pro Val Ala Asp Trp Lys Ile Phe
 85 90 95
 Tyr Phe Leu Arg Ser Leu His Arg Asn Leu Leu His Asn Pro Cys Ala
 100 105 110
 Glu Glu Gly Phe Glu Phe Trp Ser Leu Asp Val Asn Gly Gly Asp Glu
 115 120 125
 Trp Lys Val Glu Asp Leu Ser Arg Asp Gln Arg Lys Glu Phe Pro Asn
 130 135 140
 Asp Gln Val Lys Lys Tyr Phe Val Thr Ser Tyr Tyr Thr Cys Leu Lys
 145 150 155 160
 Ser Gln Val Val Asp Leu Lys Ala Glu Gly Tyr Trp Glu Glu Leu Leu
 165 170 175
 Asp Thr Phe Arg Pro Asp Ile Val Val Lys Asp Trp Phe Ala Ala Arg
 180 185 190
 Ala Asp Cys Gly Cys Thr Tyr Gln Leu Lys Val Gln Leu Leu Ser Ala
 195 200 205
 Asp Tyr Phe Val Leu Ala Ser Phe Glu Pro Asp Pro Ala Thr Ile Gln
 210 215 220
 Gln Lys Ser Asp Ala Lys Trp Arg Glu Val Ser His Thr Phe Ser Asn
 225 230 235 240
 Tyr Pro Pro Gly Val Arg Tyr Ile Trp Phe Gln His Gly Gly Val Asp
 245 250 255
 Thr His Tyr Trp Ala Gly Trp Tyr Gly Pro Arg Val Thr Asn Ser Ser
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 Ile Thr Ile Gly Pro Pro Leu Pro
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<210> 5507

<211> 1658

<212> DNA

<213> Homo sapiens

<400> 5507

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380

<210> 5505
 <211> 1099
 <212> DNA
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<210> 5506
 <211> 280
 <212> PRT
 <213> Homo sapiens

<210> 5504
 <211> 392
 <212> PRT
 <213> Homo sapiens

<400> 5504
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 35 40 45
 Ser Gly Glu Ala Thr Gly Ala Asp Ala Gly Arg Leu Cys Pro Pro Pro
 50 55 60
 Arg Ser Arg Ala Pro His Lys Asp Arg Thr Leu Ala Arg Ser Arg Pro
 65 70 75 80
 Gln Thr Gln Gly Glu Asp Cys Ser Leu Pro Val Gly Glu Val Lys Ile
 85 90 95
 Gly Lys Arg Ser Tyr Ser Pro Ala Pro Gly Lys Gln Lys Lys Pro Asn
 100 105 110
 Ala Met Gly Leu Ala Pro Thr Ser Ser Pro Gly Ala Pro Asn Ser Ala
 115 120 125
 Arg Ala Thr His Asn Pro Val Pro Cys Gly Ser Gly Arg Gly Pro Cys
 130 135 140
 His Leu Ala Asn Leu Leu Ser Thr Leu Ala Gln Ser Asn Gln Asn Arg
 145 150 155 160
 Asp His Lys Gln Gly Pro Pro Glu Val Thr Cys Gln Ile Arg Lys Lys
 165 170 175
 Thr Arg Thr Leu Tyr Arg Ser Asp Gln Leu Glu Glu Leu Glu Lys Ile
 180 185 190
 Phe Gln Glu Asp His Tyr Pro Asp Ser Asp Lys Arg Arg Glu Ile Ala
 195 200 205
 Gln Thr Val Gly Val Thr Pro Gln Arg Ile Met Val Lys Gly Ala Gly
 210 215 220
 Ser Leu Val Ala Gly Trp Ser Gly Gly Gly Pro Thr Ile Glu Thr Leu
 225 230 235 240
 Glu Leu Gln Ser Glu Arg Ser Ala Val Ala Trp Val Trp Phe Gln Asn
 245 250 255
 Arg Arg Ala Lys Trp Arg Lys Met Glu Lys Leu Asn Gly Lys Glu Ser
 260 265 270
 Lys Asp Asn Pro Ala Ala Pro Gly Pro Ala Ser Ser Gln Cys Ser Ser
 275 280 285
 Ala Ala Glu Ile Leu Pro Ala Val Pro Met Glu Pro Lys Pro Asp Pro
 290 295 300
 Phe Pro Gln Glu Ser Pro Leu Asp Thr Phe Pro Glu Pro Pro Met Leu
 305 310 315 320
 Leu Thr Ser Asp Gln Thr Leu Ala Pro Thr Gln Pro Ser Glu Gly Ala
 325 330 335
 Gln Arg Val Val Thr Pro Pro Leu Phe Ser Pro Pro Pro Val Arg Arg
 340 345 350
 Ala Asp Leu Pro Phe Pro Leu Gly Pro Val His Thr Pro Gln Leu Met
 355 360 365
 Pro Leu Leu Met Asp Val Ala Gly Ser Asp Ser Ser His Lys Asp Gly

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1679

<212> DNA

<213> Homo sapiens

<400> 5501

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<210> 5502

<211> 110

<212> PRT

<213> Homo sapiens

<400> 5502

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Glu	Ala	Gly	Thr	Lys	Pro	Cys	Ser	Ser	Glu	Val	Pro	Val	Gly	Ala	Gly
			20					25					30		
Gly	Ala	Ala	Leu	Gln	Val	Leu	Ala	His	Ala	Gln	Gln	Ala	Pro	His	Ser
			35					40				45			
Phe	Val	Thr	Thr	Lys	Gly	Thr	Val	Leu	Phe	Thr	Ala	Pro	Pro	Ala	Ser
		50				55					60				
Ala	Trp	Gln	Leu	Cys	Leu	Pro	Val	Leu	Tyr	Leu	Ile	Pro	Pro	Ala	Lys
65				70					75					80	
Leu	Ala	Arg	Gln	Gly	Pro	Ala	Leu	Lys	Glu	Ile	Ser	Leu	Pro	Asp	Pro
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Trp	Thr	Trp	Lys	Trp	Arg	Leu	His	Val	Pro	Ala	Leu	Ala	Ala		
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<210> 5503

<211> 1679

<212> DNA

<213> Homo sapiens

<400> 5503

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 35 40 45
 His Gln Phe Tyr Glu Thr Leu Pro Ala Glu Met Arg Lys Phe Thr Pro
 50 55 60
 Gln Tyr Lys Gly Val Val Ser Val Arg Phe Glu Glu Asp Glu Asp Arg
 65 70 75 80
 Asn Leu Cys Leu Ile Ala Tyr Pro Leu Lys Gly Asp His Gly Ile Val
 85 90 95
 Asp Ile Ala His Asn Ser Asp Cys Glu Pro Lys Ser Lys Leu Leu Arg
 100 105 110
 Trp Thr Thr Asn Lys Lys His His Val Leu Glu Thr Glu Lys Thr Pro
 115 120 125
 Lys Asp Trp Val Arg Gln His Arg Lys Glu Glu Lys Met Lys Ser His
 130 135 140
 Lys Leu Glu Glu Glu Phe Glu Trp Leu Lys Lys Ser Glu Val Leu Tyr
 145 150 155 160
 Tyr Thr Val Glu Lys Lys Gly Asn Ile Ser Ser Gln Leu Lys His Tyr
 165 170 175
 Asn Pro Trp Ser Met Lys Cys His Gln Gln Gln Leu Gln Arg Met Lys
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 Glu Asn Ala Lys His Arg Asn Gln Tyr Lys Phe Ile Leu Leu Glu Asn
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 Leu Thr Ser Arg Tyr Glu Val Pro Cys Val Leu Asp Leu Lys Met Gly
 210 215 220
 Thr Arg Gln His Gly Asp Asp Ala Ser Glu Glu Lys Ala Ala Asn Gln
 225 230 235 240
 Ile Arg Lys Cys Gln Gln Ser Thr Ser Ala Val Ile Gly Val Xaa Val
 245 250 255
 Cys Gly Met Gln Val Tyr Gln Ala Gly Ser Gly Gln Leu Met Phe Met
 260 265 270
 Asn Lys Tyr His Gly Arg Lys Leu Ser Val Gln Gly Phe Lys Glu Ala
 275 280 285
 Leu Phe Gln Phe Phe His Asn Gly Arg Tyr Leu Arg Arg Glu Leu Leu
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 Gly Pro Val Leu Lys Lys Leu Thr Glu Leu Lys Ala Val Leu Glu Arg
 305 310 315 320
 Gln Glu Ser Tyr Arg Phe Tyr Ser Ser Ser Leu Leu Val Ile Tyr Asp
 325 330 335
 Gly Lys Glu Arg Pro Glu Val Val Leu Asp Ser Asp Ala Glu Asp Leu
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 Glu Asp Leu Ser Glu Glu Ser Ala Asp Glu Ser Ala Gly Ala Tyr Ala
 355 360 365
 Tyr Lys Pro Ile Gly Ala Ser Ser Val Asp Val Arg Met Ile Asp Phe
 370 375 380
 Ala His Thr Thr Cys Arg Leu Tyr Gly Glu Asp Thr Val Val His Glu
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 Val Thr Glu Ile Ser Glu Glu Ser Gly Glu
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<210> 5501

<211> 568

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 1800
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 1860
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 1918

<210> 5500

<211> 426

<212> PRT

<213> Homo sapiens

<400> 5500

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 Val Leu Leu Glu Pro Phe Val His Gln Val Gly Gly His Ser Cys Val

<210> 5498
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 5498
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 Ala Gln Leu Trp Trp Ser Ser Pro Phe Ile His Ser Pro Gly Glu Thr
 35 40 45
 Asn Ile Pro His Thr Leu Thr Glu Pro His Ser Val Pro Gly Trp Cys
 50 55 60
 Trp Asp Thr Leu Arg Arg His Gly Ala Gly Gln Gly His Pro Gly Met
 65 70 75 80
 Ala Arg Ser Gly Thr Gly Glu Gly Gln Arg Glu Gly Asp Ile Glu Arg
 85 90 95
 Glu Glu Asp Glu Glu Glu Gly Asn Arg Ser Arg Lys Ser Arg Asp Ser
 100 105 110
 Arg Ser Gln Val Lys Gly Leu Pro Leu His Ser Arg Glu Gln Arg Asp
 115 120 125
 Pro Ser Ala Gly Ala Ser Glu Lys Ser Arg Asn Pro Ser Arg Met Gly
 130 135 140
 Thr Trp Gly Val Asn Phe
 145 150

<210> 5499
 <211> 1918
 <212> DNA
 <213> Homo sapiens

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Phe	His	Met	Ala	Cys	Pro	Thr	Phe	Arg	Val	Ser	Ile	Ala	Arg	Leu	Glu
	275		280		285										
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	290		295		300										
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Glu	Asp	Asp	Glu	Glu	Glu	Arg	Arg	Arg	Arg	Val	Phe	Asp	Val	Pro	Ile
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<210> 5497

<211> 1056

<212> DNA

<213> Homo sapiens

<400> 5497

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 1020
 ccgtagccca tcccttgatg gcctctgtgt ccccag
 1056

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<210> 5496

<211> 345

<212> PRT

<213> Homo sapiens

<400> 5496

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			20					25					30		
Leu	Leu	Gly	Ser	Met	Ala	Leu	Ser	Asn	His	Tyr	Arg	Ser	Glu	Asp	Leu
		35					40					45			
Leu	Asp	Val	Asp	Thr	Ala	Ala	Gly	Gly	Phe	Gln	Gln	Arg	Gln	Gly	Leu
	50					55					60				
Lys	Tyr	Cys	Leu	Pro	Leu	Thr	Phe	Cys	Ile	His	Thr	Gly	Leu	Ser	Gln
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Tyr	Ile	Ala	Val	Glu	Ala	Ala	Glu	Gly	Arg	Asn	Lys	Asn	Glu	Val	Phe
			85					90					95		
Tyr	Gln	Cys	Pro	Asp	Gln	Met	Ala	Arg	Asn	Pro	Ala	Ala	Ile	Asp	Met
			100					105					110		
Phe	Ile	Ile	Gly	Ala	Thr	Phe	Thr	Asp	Trp	Phe	Thr	Ser	Tyr	Val	Lys
		115					120					125			
Asn	Val	Val	Ser	Gly	Gly	Phe	Pro	Ile	Ile	Arg	Asp	Gln	Ile	Phe	Arg
	130					135					140				
Tyr	Val	His	Asp	Pro	Glu	Cys	Val	Ala	Thr	Thr	Gly	Asp	Ile	Thr	Val
145					150					155				160	
Ser	Val	Ser	Thr	Ser	Phe	Leu	Pro	Glu	Leu	Ser	Ser	Val	His	Pro	Pro
			165					170					175		
His	Tyr	Phe	Phe	Thr	Tyr	Arg	Ile	Arg	Ile	Glu	Met	Ser	Lys	Asp	Ala
			180					185					190		
Leu	Pro	Glu	Lys	Ala	Cys	Gln	Leu	Asp	Ser	Arg	Tyr	Trp	Arg	Ile	Thr
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Asn	Ala	Lys	Gly	Asp	Val	Glu	Glu	Val	Gln	Gly	Pro	Gly	Val	Val	Gly
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Glu	Phe	Pro	Ile	Ile	Ser	Pro	Gly	Arg	Val	Tyr	Glu	Tyr	Thr	Ser	Cys
225					230					235				240	
Thr	Thr	Phe	Ser	Thr	Thr	Ser	Gly	Tyr	Met	Glu	Gly	Tyr	Tyr	Thr	Phe
			245					250					255		
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1980
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1010 1015 1020
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 Tyr His Thr Val Leu Gln Thr Ser Ala Asp Phe Ile Asp Ala Leu Lys
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 1060 1065 1070
 Gly Ser Ala Tyr Arg Val Phe Pro Tyr Ser Val Phe Tyr Val Phe Tyr
 1075 1080 1085
 Glu Gln Tyr Leu Thr Ile Ile Asp Asp Thr Ile Phe Asn Leu Gly Val
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 Ser Leu Gly Ala Ile Phe Leu Val Thr Met Val Leu Leu Gly Cys Glu
 1105 1110 1115 1120
 Leu Trp Ser Ala Val Ile Met Cys Ala Thr Ile Ala Met Val Leu Val
 1125 1130 1135
 Asn Met Phe Gly Val Met Trp Leu Trp Gly Ile Ser Leu Asn Ala Val
 1140 1145 1150
 Ser Leu Val Asn Leu Val Met Ser Cys Gly Ile Ser Val Glu Phe Cys
 1155 1160 1165
 Ser His Ile Thr Arg Ala Phe Thr Val Ser Met Lys Gly Ser Arg Val
 1170 1175 1180
 Glu Arg Ala Glu Glu Ala Leu Ala His Met Gly Ser Ser Val Phe Ser
 1185 1190 1195 1200
 Gly Ile Thr Leu Thr Lys Phe Gly Gly Ile Val Val Leu Ala Phe Ala
 1205 1210 1215
 Lys Ser Gln Ile Phe Gln Ile Phe Tyr Phe Arg Met Tyr Leu Ala Met
 1220 1225 1230
 Val Leu Leu Gly Ala Thr His Gly Leu Ile Phe Leu Pro Val Leu Leu
 1235 1240 1245
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<210> 5495

<211> 2414

<212> DNA

<213> Homo sapiens

<400> 5495

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Asn	Tyr	Lys	Asn	Pro	Asn	Leu	Thr	Ile	Ser	Phe	Thr	Ala	Glu	Arg	Ser									
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Ile	Glu	Asp	Glu	Leu	Asn	Arg	Glu	Ser	Asp	Ser	Asp	Val	Phe	Thr	Val									
										610					615					620				
Val	Ile	Ser	Tyr	Ala	Ile	Met	Phe	Leu	Tyr	Ile	Ser	Leu	Ala	Leu	Gly									
										625					630					635				
His	Ile	Lys	Ser	Cys	Arg	Arg	Leu	Leu	Val	Asp	Ser	Lys	Val	Ser	Leu									
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Gly	Ile	Ala	Gly	Ile	Leu	Ile	Val	Leu	Ser	Ser	Val	Ala	Cys	Ser	Leu									
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Gly	Val	Phe	Ser	Tyr	Ile	Gly	Leu	Pro	Leu	Thr	Leu	Ile	Val	Ile	Glu									
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Val	Ile	Pro	Phe	Leu	Val	Leu	Ala	Val	Gly	Val	Asp	Asn	Ile	Phe	Ile									
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Leu	Val	Gln	Ala	Tyr	Gln	Arg	Asp	Glu	Arg	Leu	Gln	Gly	Glu	Thr	Leu									
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Val	Met	Pro	Ala	Val	His	Thr	Phe	Ser	Leu	Phe	Ala	Gly	Leu	Ala	Val									
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Phe	Ile	Asp	Phe	Leu	Leu	Gln	Ile	Thr	Cys	Phe	Val	Ser	Leu	Leu	Gly									
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Leu	Asp	Ile	Lys	Arg	Gln	Glu	Lys	Asn	Arg	Leu	Asp	Ile	Phe	Cys	Cys									
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Val	Arg	Gly	Ala	Glu	Asp	Gly	Thr	Ser	Val	Gln	Ala	Ser	Glu	Ser	Cys									
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Leu	Phe	Arg	Phe	Lys	Asn	Ser	Tyr	Ser	Pro	Leu	Leu	Leu	Lys	Asp										
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Gln	Tyr	Leu	His	Ala	Gly	Pro	Pro	Val	Tyr	Phe	Val	Leu	Glu	Glu	Gly									
										885					890					895				
His	Asp	Tyr	Thr	Ser	Ser	Lys	Gly	Gln	Asn	Met	Val	Cys	Gly	Gly	Met									
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Gly	Cys	Asn	Asn	Asp	Ser	Leu	Val	Gln	Gln	Ile	Phe	Asn	Ala	Ala	Gln									
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Leu	Asp	Asn	Tyr	Thr	Arg	Ile	Gly	Phe	Ala	Pro	Ser	Ser	Trp	Ile	Asp									
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<210> 5491

<211> 5555

<212> DNA

<213> Homo sapiens

<400> 5491

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<210> 5490

<211> 357

<212> PRT

<213> Homo sapiens

<400> 5490

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Trp	Leu	Gln	Gln	Gln	Gln	Gly	Leu	Gln	Thr	Val	Asp	Ile	Arg	Ala	Gln
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			85					90					95		
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		100						105				110			
Leu	Leu	Val	Ala	Thr	Ser	Val	Ala	Glu	Glu	Gly	Leu	Asp	Ile	Pro	His
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Cys	Asn	Val	Val	Val	Arg	Tyr	Gly	Leu	Leu	Thr	Asn	Glu	Ile	Ser	Met
	130				135					140					
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210		215		220	
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Ile Tyr Gln Met Pro Ser Thr Ala Ile Ser Trp Ser Val Tyr Glu Phe					
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<210> 5489

<211> 1600

<212> DNA

<213> Homo sapiens

<400> 5489

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<210> 5488

<211> 272

<212> PRT

<213> Homo sapiens

<400> 5488

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			20					25					30		
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Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu	Ala	Asn
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Pro	Ala	Glu	Val	Val	Lys	Gln	Arg	Leu	Gln	Met	Tyr	Asn	Ser	Gln	His
			100					105						110	
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		115					120					125			
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Phe	Gln	Ser	Ile	His	Phe	Ile	Thr	Tyr	Glu	Phe	Leu	Gln	Glu	Gln	Val
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			165					170						175	
Leu	Ala	Gly	Ala	Leu	Ala	Ala	Ala	Ala	Thr	Thr	Pro	Leu	Asp	Val	Cys
			180					185					190		
Lys	Thr	Leu	Leu	Asn	Thr	Gln	Glu	Asn	Val	Ala	Leu	Ser	Leu	Ala	Asn
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<210> 5487
<211> 1716
<212> DNA
<213> Homo sapiens
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<211> 290

<212> PRT

<213> Homo sapiens

<400> 5486

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			20					25					30		
Arg	Ser	Arg	Ser	Arg	Ser	Phe	Ser	Arg	Ser	Ser	Arg	Ser	His	Ser	Arg
			35				40					45			
Val	Ser	Ser	Arg	Phe	Ser	Ser	Arg	Ser	Arg	Arg	Ser	Lys	Ser	Arg	Ser
	50				55					60					
Arg	Ser	Arg	Arg	Arg	His	Gln	Arg	Lys	Tyr	Arg	Arg	Tyr	Ser	Arg	Ser
65					70				75					80	
Tyr	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Arg	Tyr	Arg	Glu	Arg
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Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Ser	Tyr	Cys	Gly
			115				120					125			
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	130				135					140					
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Glu	Leu	Leu	Glu	Ile	Ala	Lys	Thr	Asn	Ala	Ala	Lys	Ala	Leu	Gly	Thr
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Thr	Asn	Ile	Asp	Leu	Pro	Ala	Ser	Leu	Arg	Thr	Val	Pro	Ser	Ala	Lys
			195				200					205			
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	210				215					220					
Leu	Ser	Glu	Lys	Val	Thr	Glu	Asp	Gly	Thr	Arg	Asn	Pro	Asn	Glu	Lys

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 290 295 300
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 305 310 315 320
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<210> 5485

<211> 1549

<212> DNA

<213> Homo sapiens

<400> 5485

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<210> 5484

<211> 357

<212> PRT

<213> Homo sapiens

<400> 5484

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Ile	Asp	Ile	Ile	Asn	Leu	Asp	Thr	Phe	Thr	Tyr	Ile	Glu	Ser	Ala	Ser
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Glu	Leu	Arg	Gly	Gly	Phe	Asp	Trp	Ser	Leu	His	Phe	Gln	Trp	Glu	Gln
				50				55				60			
Leu	Ser	Pro	Glu	Gln	Lys	Ala	Arg	Arg	Leu	Asp	Pro	Thr	Glu	Pro	Ile
65					70				75					80	
Arg	Thr	Pro	Ile	Ile	Ala	Gly	Gly	Leu	Phe	Val	Ile	Asp	Lys	Ala	Trp
				85				90						95	
Phe	Asp	Tyr	Leu	Gly	Lys	Tyr	Asp	Met	Asp	Met	Asp	Ile	Trp	Gly	Gly
				100				105					110		
Glu	Asn	Phe	Glu	Ile	Ser	Phe	Arg	Val	Trp	Met	Cys	Gly	Gly	Ser	Leu
				115				120					125		
Glu	Ile	Val	Pro	Cys	Ser	Arg	Val	Gly	His	Val	Phe	Arg	Lys	Lys	His
				130				135					140		
Pro	Tyr	Val	Phe	Pro	Asp	Gly	Asn	Ala	Asn	Thr	Tyr	Ile	Lys	Asn	Thr
145					150				155					160	
Lys	Arg	Thr	Ala	Glu	Val	Trp	Met	Asp	Glu	Tyr	Lys	Gln	Tyr	Tyr	Tyr
				165					170					175	
Ala	Ala	Arg	Pro	Phe	Ala	Leu	Glu	Arg	Pro	Phe	Gly	Asn	Val	Glu	Ser
				180				185					190		
Arg	Leu	Asp	Leu	Arg	Lys	Asn	Leu	Arg	Cys	Gln	Ser	Phe	Lys	Trp	Tyr
				195				200					205		
Leu	Glu	Asn	Ile	Tyr	Pro	Glu	Leu	Ser	Ile	Pro	Lys	Glu	Phe	Ser	Ile
				210				215					220		
Gln	Lys	Gly	Asn	Ile	Arg	Gln	Arg	Gln	Lys	Cys	Leu	Glu	Ser	Gln	Arg
225					230					235				240	
Gln	Asn	Asn	Gln	Glu	Thr	Pro	Asn	Leu	Lys	Leu	Ser	Pro	Cys	Ala	Lys
				245					250					255	
Val	Lys	Gly	Glu	Asp	Ala	Lys	Ser	Gln	Val	Trp	Ala	Phe	Thr	Tyr	Thr

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<210> 5483
<211> 1552
<212> DNA
<213> Homo sapiens
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4655

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 720
 aagattatatt gcatgggtgc aaaagaaaaat ggtttgccgc tggagtatca agagaagtta
 780
 aaagcaatag aaccaaata gaatacagga aaggtctcag aagaaattga agacatcatc
 840
 aaaaaggggg aaacacaaac tctttagaac ataacagaat atatctaagg gtattctatg
 900
 tgctaataata aaatattttt aacacttgag aacagggatc tgggggatct ccacgtttga
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 1020
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 1260
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 1320
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 1380
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<210> 5482

<211> 188

<212> PRT

<213> Homo sapiens

<400> 5482

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Phe	Leu	Tyr	Phe	Ala	Tyr	Gly	Ser	Asn	Leu	Leu	Thr	Glu	Arg	Ile	His
			20					25					30		
Leu	Arg	Asn	Pro	Ser	Ala	Ala	Phe	Phe	Cys	Val	Ala	Arg	Leu	Gln	Asp
			35				40					45			
Phe	Lys	Leu	Asp	Phe	Gly	Asn	Ser	Gln	Gly	Lys	Thr	Ser	Gln	Thr	Trp
	50					55					60				
His	Gly	Gly	Ile	Ala	Thr	Ile	Phe	Gln	Ser	Pro	Gly	Asp	Glu	Leu	Trp
65					70				75					80	
Gly	Val	Val	Trp	Lys	Met	Asn	Lys	Ser	Asn	Leu	Asn	Ser	Leu	Asp	Glu
				85					90					95	
Gln	Glu	Gly	Val	Lys	Ser	Gly	Met	Tyr	Val	Val	Ile	Glu	Val	Lys	Val
			100					105					110		
Ala	Thr	Gln	Glu	Gly	Lys	Glu	Ile	Thr	Cys	Arg	Ser	Tyr	Leu	Met	Thr

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 Glu Gln Glu Ala Arg Glu Lys Ala Gln Ala Glu Gln Glu Glu Gln Glu
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 Arg Leu Gln Lys Gln Lys Glu Glu Ala Glu Ala Arg Ser Arg Glu Glu
 85 90 95
 Ala Glu Arg Gln Arg Leu Glu Arg Glu Lys His Phe Gln Gln Gln Glu
 100 105 110
 Gln Glu Arg Gln Glu Arg Arg Lys Arg Leu Glu Glu Ile Met Lys Arg
 115 120 125
 Thr Arg Lys Ser Glu Val Ser Glu Thr Lys Gln Lys Gln Asp Ser Lys
 130 135 140
 Glu Ala Asn Ala Asn Gly Ser Ser Pro Glu Pro Val Lys Ala Val Glu
 145 150 155 160
 Ala Arg Ser Pro Gly Leu Gln Lys Glu Ala Val Gln Lys Glu Glu Pro
 165 170 175
 Ile Pro Gln Glu Pro Gln Trp Ser Leu Pro Ser Lys Glu Leu Pro Ala
 180 185 190
 Ser Leu Val Asn Gly Leu Gln Pro Leu Pro Ala His Gln Glu Asn Gly
 195 200 205
 Phe Ser Thr Asn Gly Pro Ser Gly Asp Lys Ser Leu Ser Arg Thr Pro
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 Glu Thr Leu Leu Pro Phe Ala Glu Ala Glu Ala Phe Leu Lys Lys Ala
 225 230 235 240
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<210> 5481
 <211> 1513
 <212> DNA
 <213> Homo sapiens

<400> 5481
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 180
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 240
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 360
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 420
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 480
 agtcaaactt ggcattggagg gatagccacc atttttcaga gtcctggcga tgaattgtgg
 540
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 240
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 720
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 780
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 1380
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<210> 5480

<211> 251

<212> PRT

<213> Homo sapiens

<400> 5480

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Arg	Arg	Gln	Ala	Arg	Glu	Gln	Arg	Glu	Arg	Glu	Glu	Gln	Glu	Arg	Arg
			20				25					30			
Leu	Gln	Ala	Glu	Arg	Asp	Lys	Arg	Met	Arg	Glu	Glu	Gln	Leu	Ala	Arg

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 300
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 360
 cctggacccc tggctggctc ctcaacttca ctctccgcac ttagtgcccc gccgccccca
 420
 gactcatcgt cgctcagccc ataggggaagc ccaggcctgg cccccagaga gtctccttcc
 480
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 727

<210> 5478
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 5478
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 20 25 30
 Ala Pro Gly Gln Arg Gly Arg Lys Arg Trp Leu Leu Val Arg Leu Tyr
 35 40 45
 Lys Thr Trp Pro Leu Thr Cys Arg Pro Pro Thr Gln Leu Ala Gly Trp
 50 55 60
 Ala Gly Leu Ser Pro Leu Ala Ser Pro Gly Pro Leu Ala Gly Ser Ser
 65 70 75 80
 Thr Ser Leu Ser Ala Leu Ser Ala Arg Pro Pro Pro Asp Ser Ser Ser
 85 90 95
 Leu Ser Pro

<210> 5479
 <211> 1386
 <212> DNA
 <213> Homo sapiens

<400> 5479
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 atgcgagagg agcagctggc acgggaggcc gagggccggg cggagcggga ggcggaggcc
 180

cctgagaaga aagcagcggg cggggcgcca cggagggggcc ctctggggggg acggaaaaaa
 540
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<210> 5476

<211> 209

<212> PRT

<213> Homo sapiens

<400> 5476

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Asp	Lys	Cys	Lys	Asp	Lys	Tyr	Gly	Lys	Pro	Asn	Lys	Arg	Lys	Gly	Phe
	20						25					30			
Asn	Glu	Gly	Leu	Trp	Glu	Ile	Gln	Asn	Pro	His	Ala	Ser	Tyr	Ser	
	35				40					45					
Ala	Pro	Pro	Pro	Val	Ser	Ser	Ser	Asp	Ser	Glu	Ala	Pro	Glu	Ala	Asn
	50				55					60					
Pro	Ala	Asp	Gly	Ser	Asp	Ala	Asp	Glu	Asp	Asp	Glu	Asp	Arg	Gly	Val
65				70				75					80		
Met	Ala	Val	Thr	Ala	Val	Thr	Ala	Thr	Ala	Ala	Ser	Asp	Arg	Met	Glu
			85				90						95		
Ser	Asp	Ser	Asp	Ser	Asp	Lys	Ser	Ser	Asp	Asn	Ser	Gly	Leu	Lys	Arg
	100						105						110		
Lys	Thr	Pro	Ala	Leu	Lys	Met	Ser	Val	Ser	Lys	Arg	Ala	Arg	Lys	Ala
	115					120						125			
Ser	Ser	Asp	Leu	Asp	Gln	Ala	Ser	Val	Ser	Pro	Ser	Glu	Glu	Glu	Asn
	130				135					140					
Ser	Glu	Ser	Ser	Ser	Glu	Ser	Glu	Lys	Thr	Ser	Asp	Gln	Asp	Phe	Thr
145				150				155						160	
Pro	Glu	Lys	Lys	Ala	Ala	Val	Arg	Ala	Pro	Arg	Arg	Gly	Pro	Leu	Gly
			165					170					175		
Gly	Arg	Lys	Lys	Lys	Lys	Ala	Pro	Ser	Ala	Ser	Asp	Ser	Asp	Ser	Lys
		180					185					190			
Ala	Asp	Ser	Asp	Gly	Ala	Lys	Pro	Glu	Pro	Val	Ala	Met	Ala	Arg	Ser
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<210> 5477

<211> 727

<212> DNA

<213> Homo sapiens

<400> 5477

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 120
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 180

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<210> 5474

<211> 139

<212> PRT

<213> Homo sapiens

<400> 5474

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Ser	Asn	His	Thr	Ile	Trp	Phe	Gly	His	Phe	Thr	Thr	Ser	Thr	Ile	Leu
			20					25					30		
Ser	Pro	Ser	Pro	Gly	Ile	Arg	Ser	Ile	Met	Ser	Ser	Ala	Ile	Ala	Tyr
		35					40					45			
Leu	Cys	Gly	His	Leu	His	Thr	Leu	Gly	Gly	Leu	Met	Pro	Val	Leu	His
	50					55					60				
Thr	Arg	His	Phe	Gln	Gly	Thr	Leu	Glu	Leu	Glu	Val	Gly	Asp	Trp	Lys
65					70					75				80	
Asp	Asn	Arg	Arg	Tyr	Arg	Ile	Phe	Ala	Phe	Asp	His	Asp	Leu	Phe	Ser
				85					90					95	
Phe	Ala	Asp	Leu	Ile	Phe	Gly	Lys	Trp	Pro	Val	Val	Leu	Ile	Thr	Asn
			100					105					110		
Pro	Lys	Ser	Leu	Leu	Tyr	Ser	Cys	Gly	Glu	His	Glu	Pro	Leu	Glu	Arg
		115					120					125			
Leu	Leu	His	Ser	Thr	His	Ile	Arg	Leu	Val	Thr					
		130					135								

<210> 5475

<211> 628

<212> DNA

<213> Homo sapiens

<400> 5475

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 120
 aacaaccccc acgccagcta cagcgcctt ccgccagtga gctcctccga cagcgaggcc
 180
 cccgaggcca accccgccga cggcagtga gctgacgagg acgatgagga cgggggggtc
 240
 atggccgtca cagcggtaac cgccacagct gccagcgaca ggatggagag cgactcagac
 300
 tcagacaaga gtagcgacaa cagtggcctg aagaggaaga cgctgcgct aaagatgtcg
 360
 gtctcgaaac gagcccga ggcctccagc gacctggatc aggccagcgt gtccccatcc
 420
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 480

<210> 5472
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 5472
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 Pro Ser Ala His Leu Leu Gly Leu His Thr Gln Arg His Ala Asp Gly
 35 40 45
 Phe Leu Cys Leu Cys Thr His Ala Gly Ala Gly Gly Ser Val His Thr
 50 55 60
 Pro Pro Arg Leu Arg Ala Arg Pro Tyr Met Pro Cys Ala Pro Thr Gln
 65 70 75 80
 Ala Gly Leu Gly Ser Leu His Ser Pro Leu Arg Val His Ser His Ile
 85 90 95
 Ala Thr His Ser Cys Pro His Lys Leu Val Ser Leu Tyr Ser Ala His
 100 105 110
 Gly His Thr Cys Ala Pro His Leu Ala Thr Arg Thr Pro Gly Leu Cys
 115 120 125
 Ile Pro His Pro Gly Ser Gly Pro Arg Val Val Gly Pro Ala Gly Ser
 130 135 140
 Ala Ala Ala Ser Ala Arg Thr Val Leu Phe Leu Arg Pro Arg Gly Ala
 145 150 155 160
 Ala

<210> 5473
 <211> 691
 <212> DNA
 <213> Homo sapiens

<400> 5473
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 180
 aggcagcatg aggtagaatg gcaaacctac cagggtattc tgaagaagac aagagtcattg
 240
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 300
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 360
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 480
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 540

195 200 205
 Asp Ala Leu Lys Gln Arg Ala Glu Gln Ser Ile Ser Glu Glu Pro Gly
 210 215 220
 Trp Glu Glu Glu Glu Glu Leu Met Gly Ile Ser Pro Ile Ser Pro
 225 230 235 240
 Lys Glu Ala Lys Val Pro Val Ala Lys Ile Ser Thr Phe Pro Glu Gly
 245 250 255
 Glu Pro Gly Pro Gln Ser Pro Cys Glu Glu Asn Leu Val Thr Ser Val
 260 265 270
 Glu Pro Pro Ala Glu Val Thr Pro Ser Glu Ser Ser Glu Ser Ile Ser
 275 280 285
 Leu Val Thr Gln Ile Ala Asn Pro Ala Thr Ala Pro Glu Ala Arg Val
 290 295 300
 Leu Pro Lys Asp Leu Ser Gln Lys Leu Leu Glu Ala Ser Leu Glu Glu
 305 310 315 320
 Gln Gly Leu Ala Val Asp Val Gly Glu Thr Gly Pro Ser Pro Ile
 325 330 335
 His Ser Lys Pro Leu Thr Pro Ala Gly His Thr Gly Gly Pro Glu Pro
 340 345 350
 Arg Pro Pro Ala Arg Val Glu Thr Leu Arg Glu Glu Ala Pro Thr Asp
 355 360 365
 Leu Arg Val Phe Glu Leu Asn Ser Asp Ser Gly Lys Ser Thr Pro Ser
 370 375 380
 Asn Asn Gly Lys Lys Gly Ser Ser Thr Asp Ile Ser Glu Asp Trp Glu
 385 390 395 400
 Lys Asp Phe Asp Leu Asp Met Thr Glu Glu Glu Val Gln Met Ala Leu
 405 410 415
 Ser Lys Val Asp Ala Ser Gly Glu Leu Lys Met
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<210> 5471

<211> 534

<212> DNA

<213> Homo sapiens

<400> 5471

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 180
 gacacgaatg tgtagctatg tgcgagtgc caccgagtg tgagtgcagg gacccagggc
 240
 cggcctgcgt cgggtgcgcag ggcatatagg ggcgtgcacg cagtcttgga ggtgtgtgca
 300
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 360
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 420
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 480
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<210> 5470

<211> 427

<212> PRT

<213> Homo sapiens

<400> 5470

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		20						25					30		
Leu	Glu	Phe	Met	Lys	Arg	Asp	Leu	Thr	Glu	Phe	Thr	Gln	Val	Val	Gln
		35				40						45			
His	Asp	Thr	Ala	Cys	Thr	Ile	Ala	Ala	Thr	Ala	Ser	Val	Val	Lys	Glu
	50					55					60				
Lys	Leu	Ala	Thr	Glu	Gly	Ser	Ser	Gly	Ala	Thr	Glu	Lys	Met	Lys	Lys
65				70					75					80	
Gly	Leu	Ser	Asp	Phe	Leu	Gly	Val	Ile	Ser	Asp	Thr	Phe	Ala	Pro	Ser
			85					90						95	
Pro	Asp	Lys	Thr	Ile	Asp	Cys	Asp	Val	Ile	Thr	Leu	Met	Gly	Thr	Pro
		100						105					110		
Ser	Gly	Thr	Ala	Glu	Pro	Tyr	Asp	Gly	Thr	Lys	Ala	Arg	Leu	Tyr	Ser
		115					120					125			
Leu	Gln	Ser	Asp	Pro	Ala	Thr	Tyr	Cys	Asn	Glu	Pro	Asp	Gly	Pro	Pro
		130				135					140				
Glu	Leu	Phe	Asp	Ala	Trp	Leu	Ser	Gln	Phe	Cys	Leu	Glu	Glu	Lys	Lys
145				150					155					160	
Gly	Glu	Ile	Ser	Glu	Leu	Leu	Val	Gly	Ser	Pro	Ser	Ile	Arg	Ala	Leu
			165					170					175		
Tyr	Thr	Lys	Met	Val	Pro	Ala	Ala	Val	Ser	His	Ser	Glu	Phe	Trp	His
		180						185				190			
Arg	Tyr	Phe	Tyr	Lys	Val	His	Gln	Leu	Glu	Gln	Glu	Gln	Ala	Arg	Arg

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<210> 5469
<211> 1292
<212> DNA
<213> Homo sapiens
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<400> 5469
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120
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180
gtggtcaagg agaagctggc tacggaaggc tcctcaggag caacagagaa gatgaagaaa
240
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300
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420
gatgggcccc cggaattggt tgacgcctgg ctttcccagt tctgcttgga ggagaagaa
480
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540
gttccagcag ctgtttccca ttcagaattc tggcatcggt atttctataa agtccatcag
600
ttagagcagg agcaggcccc gagggacgcc ctgaagcagc gggcggaaca gagcatctct
660

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 720
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 780
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 840
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 tatcccatcc ccaccaaact ccccctcacc aaatcagagg agaaggcctt gaagaaaatt
 960
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 1020
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 1080
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<210> 5468

<211> 363

<212> PRT

<213> Homo sapiens

<400> 5468

Met	Asp	Ala	Val	Leu	Glu	Pro	Phe	Pro	Ala	Asp	Arg	Leu	Phe	Pro	Gly
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Ser	Ser	Phe	Leu	Asp	Leu	Gly	Asp	Leu	Asn	Glu	Ser	Asp	Phe	Leu	Asn
			20					25					30		
Asn	Ala	His	Phe	Pro	Glu	His	Leu	Asp	His	Phe	Thr	Glu	Asn	Met	Glu
			35				40					45			
Asp	Phe	Ser	Asn	Asp	Leu	Phe	Ser	Ser	Phe	Phe	Asp	Asp	Pro	Val	Leu
	50				55						60				
Asp	Glu	Lys	Ser	Pro	Leu	Leu	Asp	Met	Glu	Leu	Asp	Ser	Pro	Thr	Pro
65					70					75				80	
Gly	Ile	Gln	Ala	Glu	His	Ser	Tyr	Ser	Leu	Ser	Gly	Asp	Ser	Ala	Pro
			85					90						95	
Gln	Ser	Pro	Leu	Val	Pro	Ile	Lys	Met	Glu	Asp	Thr	Thr	Gln	Asp	Ala
			100					105					110		
Glu	His	Gly	Ala	Trp	Ala	Leu	Gly	His	Lys	Leu	Cys	Ser	Ile	Met	Val
		115					120					125			
Lys	Gln	Glu	Gln	Ser	Pro	Glu	Leu	Pro	Val	Asp	Pro	Leu	Ala	Ala	Pro
		130				135					140				
Ser	Ala	Met	Ala	Ala	Ala	Ala	Ala	Met	Ala	Thr	Thr	Pro	Leu	Leu	Gly
145					150					155				160	
Leu	Ser	Pro	Leu	Ser	Arg	Leu	Pro	Ile	Pro	His	Gln	Ala	Pro	Gly	Glu

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497

<210> 5466
<211> 134
<212> PRT
<213> Homo sapiens

<400> 5466
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20 25 30
Val Arg Asp Glu Pro Pro Ala Lys Pro Val Gly Met Ser Gly Pro Ser
35 40 45
Trp Trp Asp Cys Leu Gly His Arg His Gln His Gly Val Arg Ala Ile
50 55 60
Ser Gly Asp Ile Gly Gly Ala Thr Thr Arg Trp Gly Ile Phe Asn Arg
65 70 75 80
Leu Glu Pro Leu Arg Leu Glu Arg Pro Thr Pro Gly Arg Arg Pro Pro
85 90 95
Leu Thr Pro Leu Leu Pro Leu Leu Trp Asp Pro Pro Val Asp Thr Pro
100 105 110
Asp Glu Asp Thr Gln Glu Ala Ser Ser Gln Asp Arg Arg Gln Leu Pro
115 120 125
Gly Gln Pro Arg Ser Ala
130

<210> 5467
<211> 1329
<212> DNA
<213> Homo sapiens

<400> 5467
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180
cactttcttg agcacctgga ccactttacg gagaacatgg aggacttctc caatgacctg
240
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300
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360
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480
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540
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600

gtgaagcagc gcttgcatat gtacaactcg cagcaccggg cagcaatcag ctgcatccgg
 600
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 660
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 720
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 780
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 792

<210> 5464

<211> 111

<212> PRT

<213> Homo sapiens

<400> 5464

Phe	Ser	Gly	Val	Cys	Phe	Ala	Gly	Ile	Ala	Gly	Ser	Met	Ala	Thr	Leu
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Leu	His	Asp	Ala	Val	Met	Asn	Pro	Ala	Glu	Val	Val	Lys	Gln	Arg	Leu
			20					25					30		
Gln	Met	Tyr	Asn	Ser	Gln	His	Arg	Ser	Ala	Ile	Ser	Cys	Ile	Arg	Thr
		35					40					45			
Val	Trp	Arg	Thr	Glu	Gly	Leu	Gly	Ala	Phe	Tyr	Arg	Ser	Tyr	Thr	Thr
	50					55					60				
Gln	Leu	Thr	Met	Asn	Ile	Pro	Phe	Gln	Ser	Ile	His	Phe	Ile	Thr	Tyr
65					70					75				80	
Glu	Phe	Leu	Gln	Glu	Gln	Val	Asn	Pro	His	Arg	Thr	Tyr	Asn	Pro	Gln
				85					90				95		
Ser	His	Ile	Ile	Ser	Gly	Gly	Leu	Ala	Gly	Ala	Leu	Ala	Ala	Ala	
			100				105						110		

<210> 5465

<211> 497

<212> DNA

<213> Homo sapiens

<400> 5465

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 120
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 aacccccggc aggagacctc cctgacccc tctgctgcct ctctgtggg accctccagt
 420
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1725

<210> 5462
<211> 159
<212> PRT
<213> Homo sapiens

<400> 5462
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20 25 30
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35 40 45
Ala Gln Arg Gly Cys Gln Leu Leu Val Tyr Pro Gly Ala Phe Asn Leu
50 55 60
Thr Thr Gly Pro Ala His Trp Glu Leu Leu Gln Arg Ser Arg Ala Val
65 70 75 80
Asp Asn Gln Val Tyr Val Ala Thr Ala Ser Pro Ala Arg Asp Asp Lys
85 90 95
Ala Ser Tyr Val Ala Trp Gly His Ser Thr Val Val Asn Pro Trp Gly
100 105 110
Glu Val Leu Ala Lys Ala Gly Thr Glu Glu Ala Ile Val Tyr Ser Asp
115 120 125
Ile Asp Leu Lys Lys Leu Ala Glu Ile Arg Gln Gln Ile Pro Val Phe
130 135 140
Arg Gln Lys Arg Ser Asp Leu Tyr Ala Val Glu Met Lys Lys Pro
145 150 155

<210> 5463
<211> 792
<212> DNA
<213> Homo sapiens

<400> 5463
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120
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180
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240
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300
atttttatca tatttccacc atcacttcag ggttttaaga gtcagtgtc acctgggagg
360
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420
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480
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540

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180
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240
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300
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360
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420
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480
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1680

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 1020
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 1320
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 1380
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 1468

<210> 5460

<211> 155

<212> PRT

<213> Homo sapiens

<400> 5460

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			20				25					30			
Ser	Glu	Asp	Tyr	Glu	Asn	Leu	Pro	Thr	Ser	Ala	Ser	Val	Ser	Thr	His
		35				40						45			
Met	Thr	Ala	Gly	Ala	Met	Ala	Gly	Ile	Leu	Glu	His	Ser	Val	Met	Tyr
	50					55					60				
Pro	Val	Asp	Ser	Val	Lys	Thr	Arg	Met	Gln	Ser	Leu	Ser	Pro	Asp	Pro
65					70				75					80	
Lys	Ala	Gln	Tyr	Thr	Ser	Ile	Tyr	Gly	Ala	Leu	Lys	Lys	Ile	Met	Gln
			85					90						95	
Thr	Glu	Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met
		100					105						110		
Gly	Ala	Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met
		115					120					125			
Lys	Arg	Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu
	130					135						140			
Ala	Asn	Gly	Ile	Leu	Lys	Ala	Phe	Val	Trp	Ser					
145					150					155					

<210> 5461

<211> 1725

<212> DNA

<213> Homo sapiens

<400> 5461

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 60

<213> Homo sapiens

<400> 5458

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Arg Ser Gly Ser Val Gly Ser Gln Ala Val Ala Arg Arg Met Asp Gly
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Asp Ser Arg Asp Gly Gly Gly Gly Lys Asp Ala Thr Gly Ser Glu Asp
          20          25          30
Tyr Glu Asn Leu Pro Thr Ser Ala Ser Val Ser Thr His Met Thr Ala
          35          40          45
Gly Ala Met Ala Gly Ile Leu Glu His Ser Val Met Tyr Pro Val Asp
          50          55          60
Ser Val Lys Val Met Trp Thr Val Glu Leu Cys Ala Gly His Phe Gln
65          70          75          80
Pro

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<210> 5459

<211> 1468

<212> DNA

<213> Homo sapiens

<400> 5459

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<210> 5456
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 5456
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 20 25 30
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 35 40 45
 His Cys Pro Leu Ala Val Arg Leu Ala Cys Pro Ala Val Pro Thr Thr
 50 55 60
 Val Val Lys Gln Arg Leu Gln Met Tyr Asn Ser Gln His Arg Ser Ala
 65 70 75 80
 Ile Ser Cys Ile Arg Thr Val Trp Arg Thr Glu Gly Leu Gly Ala Phe
 85 90 95
 Tyr Arg Ser Tyr Thr Thr Gln Leu Thr Met Asn Ile Pro Phe Gln Ser
 100 105 110
 Ile His Phe Ile Thr Tyr Glu Phe Leu Gln Glu Gln Val Asn Pro His
 115 120 125
 Arg Thr Tyr Asn Pro Gln Ser His Ile Ile Ser Gly Gly Leu Ala Gly
 130 135 140
 Ala Leu Ala Ala Ala
 145

<210> 5457
 <211> 448
 <212> DNA
 <213> Homo sapiens

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<210> 5458
 <211> 81
 <212> PRT

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	245	250
Gln Leu Val Gln Ala Leu Arg Ala Thr Pro Asp Pro Asp Pro Glu Asp		255
	260	265
Arg Gly Pro Arg Pro Gly Ser Pro Ser Ala Leu Leu Pro Gly Pro Gly		270
	275	280
Arg Pro Pro Pro Pro Thr Lys Pro Pro Glu Thr Glu Ala Gln Arg		285
	290	295
Gly Pro Cys Leu Gln Trp Leu Ser Glu Trp Thr Leu Glu Pro Asp Ser		300
305	310	315
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<210> 5455

<211> 975

<212> DNA

<213> Homo sapiens

<400> 5455

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180
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240
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<210> 5454

<211> 320

<212> PRT

<213> Homo sapiens

<400> 5454

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Phe	Arg	Phe	Cys	His	Gln	Leu	Asp	Phe	Ser	Thr	Ser	Gly	Ala	Leu	Cys
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Val	Ala	Leu	Asn	Lys	Ala	Ala	Ala	Gly	Ser	Ala	Tyr	Arg	Cys	Phe	Lys
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			100					105					110		
Gln	Glu	Ser	Arg	Val	Thr	Ile	Ser	His	Ala	Ile	Gly	Arg	Asn	Ser	Thr
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	130					135					140				
Gly	Cys	Glu	Asn	Pro	Lys	Pro	Ser	Leu	Thr	Asp	Leu	Val	Val	Leu	Glu
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His	Gly	Leu	Tyr	Ala	Gly	Asp	Pro	Val	Ser	Lys	Val	Leu	Leu	Lys	Pro
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Leu	Thr	Gly	Arg	Thr	His	Gln	Leu	Arg	Val	His	Cys	Ser	Ala	Leu	Gly
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His	Pro	Val	Val	Gly	Asp	Leu	Thr	Tyr	Gly	Glu	Val	Ser	Gly	Arg	Glu
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<210> 5453
<211> 1974
<212> DNA
<213> Homo sapiens

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<210> 5452

<211> 206

<212> PRT

<213> Homo sapiens

<400> 5452

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 35 40 45
 Leu Ser Pro Ala Leu Ser Gln Thr Thr Gln Lys Ser Gly His Leu Trp
 50 55 60
 Ala Pro Gly Met Val Thr Glu Glu Lys His Ala Val Pro Val Ser Pro
 65 70 75 80
 Gly Phe Cys Gln Lys Ile Glu Gln Val Gln Leu Thr His Cys Tyr Cys
 85 90 95
 Arg Ser Leu Lys Leu Pro Gly Leu Val Leu Asp Pro Ser Arg Asn His
 100 105 110
 Gln Val Arg His Leu Glu Pro Pro Gly Glu Gly Pro Pro Ser Arg Ala
 115 120 125
 Leu Lys Glu Leu His Glu Ile Arg Asn Cys Leu Met Lys Cys Ile Ser
 130 135 140
 Leu Tyr Leu Glu Asp Glu Ala Gln Thr Pro Thr Pro Leu Ser Pro Pro
 145 150 155 160
 Gly Leu Gly Met Ser Pro Ala Ala Arg Pro Arg Ser Phe Pro Gly Gly
 165 170 175
 Leu Gly Glu Val Gly Ala Gly Thr Ile Ser Val Pro Ser Thr Leu Thr
 180 185 190
 Pro Ser Thr Ser Glu Thr Thr Leu Pro Gln Pro Asp Thr Glu

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Trp Phe Thr Asp Leu Ser Leu Tyr Arg Phe Leu Gln Thr Ala Glu Met
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Val Lys Pro Ser Thr Pro Ser Pro Ser His Glu Ser Ser Ser Ser Ser
          115          120          125
Gly Ser Asp Glu Gly Thr Glu Tyr Tyr Pro His Leu Val Phe Phe Gln
          130          135          140
Asn Lys Ala Arg Arg Glu Asp Phe Cys Pro Arg Lys Leu Arg Gln Met
145          150          155          160
His Leu Met Ile Asp Gln Leu Met Ala His Ser His Leu Arg Tyr Lys
          165          170          175
Gly Thr Leu Ser Met Leu Gln Cys Asn Val Phe Pro Gly Leu Pro Pro
          180          185          190
Asp Phe Leu Asp Ser Glu Val Asn Leu Phe Leu Val Pro Phe Met Asp
          195          200          205
Ser Glu Ala Glu Ser Glu Asn Pro Pro Arg Ala Gly Pro Gly Ser Ser
          210          215          220
Pro Leu Phe Ser Leu Leu Pro Gly Tyr Arg Gly His Pro Ser Phe Gln
225          230          235          240
Ser Leu Val Ser Lys Leu Arg Ser Gln Val Met Ser Met Ala Arg Pro
          245          250          255
Gln Leu Ser His Thr Ile Leu Thr Glu Lys Asn Trp Phe His Tyr Ala
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<210> 5451

<211> 1184

<212> DNA

<213> Homo sapiens

<400> 5451

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<210> 5450

<211> 293

<212> PRT

<213> Homo sapiens

<400> 5450

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			20				25						30		
Ile	Thr	Gln	Glu	Arg	Ile	Val	Phe	Leu	Asp	Thr	Gln	Pro	Ile	Leu	Ser
		35				40					45				
Pro	Ser	Ile	Leu	Asp	His	Leu	Ile	Asn	Asn	Asp	Arg	Lys	Leu	Pro	Pro
	50					55					60				
Glu	Tyr	Asn	Leu	Pro	His	Thr	Tyr	Val	Glu	Met	Gln	Ser	Leu	Gln	Ile

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<210> 5448
 <211> 189
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Val Thr Asp Val Phe Gln Gly Ser Met Arg Ile Phe Thr Lys Lys Leu
 50 55 60
 Pro His Pro Asp Leu Pro Ala Glu Glu Lys Glu Gln Leu Leu His Asn
 65 70 75 80
 Asp Glu Tyr Gln Glu Thr Met Val Glu Ser Thr Phe Met Tyr Leu Thr
 85 90 95
 Leu Asp Leu Pro Thr Ala Pro Leu Tyr Lys Asp Glu Lys Glu Gln Leu
 100 105 110
 Ile Ile Pro Gln Val Pro Leu Phe Asn Ile Leu Ala Lys Phe Asn Gly
 115 120 125
 Ile Thr Glu Lys Glu Tyr Lys Thr Tyr Lys Glu Asn Phe Leu Lys Arg
 130 135 140
 Phe Gln Leu Thr Lys Leu Pro Pro Tyr Leu Ile Phe Cys Ile Lys Arg
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<210> 5449
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 <212> DNA
 <213> Homo sapiens

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<210> 5447

<211> 1444

<212> DNA

<213> Homo sapiens

<400> 5447

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<210> 5446

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5446

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 Gly Thr Gln Trp Phe His Pro Gln Val Cys Ser Asn Arg His His Ser
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 Pro Arg Pro His Ala Asp Ser Asp Thr Arg Ala His Ser Pro Arg Ser

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 Leu Lys Ala Tyr Thr Leu Tyr Arg Pro Glu Glu Gly Tyr Cys Gln Ala
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 Gln Ala Pro Ile Ala Ala Val Leu Leu Met His Met Pro Ala Glu Gln
 130 135 140
 Ala Phe Trp Cys Leu Val Gln Ile Cys Glu Lys Tyr Leu Pro Gly Tyr
 145 150 155 160
 Tyr Ser Glu Lys Leu Glu Ala Ile Gln Leu Asp Gly Glu Ile Leu Phe
 165 170 175
 Ser Leu Leu Gln Lys Val Ser Pro Val Ala His Lys His Leu Ser Arg
 180 185 190
 Gln Lys Ile Asp Pro Leu Leu Tyr Met Thr Glu Trp Phe Met Cys Ala
 195 200 205
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 210 215 220
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 225 230 235 240
 Leu Lys His Ala Leu Gly Ser Pro Glu Lys Val Lys Ala Cys Gln Gly
 245 250 255
 Gln Tyr Glu Thr Ile Glu Arg Leu Arg Ser Leu Ser Pro Lys Ile Met
 260 265 270
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 275 280 285
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 290 295 300
 Thr Arg Gly Glu Leu Gln Cys Arg Ser Pro Pro Arg Leu His Gly Ala
 305 310 315 320
 Lys Ala Ile Leu Asp Ala Glu Pro Gly Pro Arg Pro Ala Leu Gln Pro
 325 330 335
 Ser Pro Ser Ile Arg Leu Pro Leu Asp Ala Pro Leu Pro Gly Ser Lys
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 Ala Lys Pro Lys Pro Pro Lys Gln Ala Gln Lys Glu Gln Arg Lys Gln
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 370 375 380
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 Pro Lys Asp Ser Ala Pro Lys Asp Ser Ala Pro Gln Asp Leu Ala Pro
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<210> 5445

<211> 1187

<212> DNA

<213> Homo sapiens.

<400> 5445

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<210> 5444

<211> 438

<212> PRT

<213> Homo sapiens

<400> 5444

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			20				25						30		
Lys	Ile	Arg	Leu	Arg	Cys	Gln	Lys	Gly	Ile	Pro	Pro	Ser	Leu	Arg	Gly
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Arg	Ala	Trp	Gln	Tyr	Leu	Ser	Gly	Gly	Lys	Val	Lys	Leu	Gln	Gln	Asn
			50			55					60				
Pro	Gly	Lys	Phe	Asp	Glu	Leu	Asp	Met	Ser	Pro	Gly	Asp	Pro	Lys	Trp
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Leu	Asp	Val	Ile	Glu	Arg	Asp	Leu	His	Arg	Gln	Phe	Pro	Phe	His	Glu

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Lys Thr Asn Lys Ser Thr Lys Gln Gln Ala Leu Glu Val Ile Lys Gln					
145		150		155	160
Leu Lys Glu Lys Met Lys Ile Glu Arg Ala His Met Arg Leu Arg Phe					
	165		170		175
Ile Leu Pro Val Asn Glu Gly Lys Lys Leu Lys Glu Lys Leu Lys Pro					
	180		185		190
Leu Ile Lys Val Ile Glu Ser Glu Asp Tyr Gly Gln Gln Leu Glu Ile					
	195		200		205
Val Cys Leu Ile Asp Pro Gly Cys Phe Arg Glu Ile Asp Glu Leu Ile					
	210		215		220
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<210> 5443

<211> 2021

<212> DNA

<213> Homo sapiens

<400> 5443

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<210> 5442

<211> 250

<212> PRT

<213> Homo sapiens

<400> 5442

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		20						25					30		
Lys	Asn	Lys	Val	Val	Gly	Trp	Arg	Ser	Gly	Val	Glu	Lys	Asp	Leu	Asp
		35					40					45			
Glu	Val	Leu	Gln	Thr	His	Ser	Val	Phe	Val	Asn	Val	Ser	Lys	Gly	Gln
		50				55				60					
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65				70						75				80	
Thr	Glu	Ile	Cys	Lys	Gln	Ile	Leu	Thr	Lys	Gly	Glu	Val	Gln	Val	Ser
			85					90					95		
Asp	Lys	Glu	Arg	His	Thr	Gln	Leu	Glu	Gln	Met	Phe	Arg	Asp	Ile	Ala
		100						105					110		
Thr	Ile	Val	Ala	Asp	Lys	Cys	Val	Asn	Pro	Glu	Thr	Lys	Arg	Pro	Tyr
		115					120					125			
Thr	Val	Ile	Leu	Ile	Glu	Arg	Ala	Met	Lys	Asp	Ile	His	Tyr	Ser	Val

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 305 310 315 320
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 340 345 350
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 355 360 365
 Met Tyr Lys Gly Gly Lys Ala Asp Gln Gln Glu Glu Arg Arg Arg Gln
 370 375 380
 Lys Gln Met Lys Val Leu Lys Lys Glu Leu Arg His Leu Leu Ser Gln
 385 390 395 400
 Pro Leu Phe Thr Glu Ser Gln Lys Thr Lys Tyr Pro Thr Gln Ser Gly
 405 410 415
 Lys Pro Pro Leu Leu Val Ser Ala Pro Ser Lys Ser Glu Ser Ala Leu
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<211> 1635

<212> DNA

<213> Homo sapiens

<400> 5441

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<210> 5440

<211> 461

<212> PRT

<213> Homo sapiens

<400> 5440

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Gln	Arg	Met	Leu	Asn	Arg	Arg	Pro	Glu	Ile	Val	Val	Ala	Thr	Pro	Gly	35	40	45	
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Arg	Gln	Leu	Arg	Cys	Leu	Val	Val	Asp	Glu	Ala	Asp	Arg	Met	Val	Glu	65	70	75	80
Lys	Gly	His	Phe	Ala	Glu	Leu	Ser	Gln	Leu	Glu	Met	Leu	Asn	Asp		85	90	95	
Ser	Gln	Tyr	Asn	Pro	Lys	Arg	Gln	Thr	Leu	Val	Phe	Ser	Ala	Thr	Leu	100	105	110	
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Thr	Val	Glu	Thr	Leu	Thr	Glu	Thr	Lys	Ile	His	Cys	Glu	Thr	Asp	Glu	165	170	175	
Lys	Asp	Phe	Tyr	Leu	Tyr	Tyr	Phe	Leu	Met	Gln	Tyr	Pro	Gly	Arg	Ser	180	185	190	
Leu	Val	Phe	Ala	Asn	Ser	Ile	Ser	Cys	Ile	Lys	Arg	Leu	Ser	Gly	Leu	195	200	205	
Leu	Lys	Val	Leu	Asp	Ile	Met	Pro	Leu	Thr	Leu	His	Ala	Cys	Met	His	210	215	220	
Gln	Lys	Gln	Arg	Leu	Arg	Asn	Leu	Glu	Gln	Phe	Ala	Arg	Leu	Glu	Asp	225	230	235	240
Cys	Val	Leu	Leu	Ala	Thr	Asp	Val	Ala	Ala	Arg	Gly	Leu	Asp	Ile	Pro	245	250	255	
Lys	Val	Gln	His	Val	Ile	His	Tyr	Gln	Val	Pro	Arg	Thr	Ser	Glu	Ile	260	265	270	
Tyr	Val	His	Arg	Ser	Gly	Arg	Thr	Ala	Arg	Ala	Thr	Asn	Glu	Gly	Leu	275	280	285	
Ser	Leu	Met	Leu	Ile	Gly	Pro	Glu	Asp	Val	Ile	Asn	Phe	Lys	Lys	Ile				

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			100					105					110	
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Asp	Gly	Lys	Leu	Phe	Asn	His	Leu	Glu	Thr	Ile	Trp	Arg	Phe	Ser
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Gly	Ile	Pro	Ala	Tyr	Pro	Arg	Thr	Cys	Thr	Val	Asp	Phe	Ser	Ile
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		180						185					190	
Phe	Glu	Phe	Arg	Ser	Leu	Leu	His	Ser	Gln	Leu	Ala	Thr	Met	Phe
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		195					200					205		
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		210				215					220			
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<211> 4234

<212> DNA

<213> Homo sapiens

<400> 5439

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 1422

<210> 5438

<211> 245

<212> PRT

<213> Homo sapiens

<400> 5438

Phe	Arg	Gly	Gly	Val	Leu	Tyr	Trp	Asp	Ala	Gly	Ala	Ala	Gly	Thr
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Gly	Ser	Asn	His	Ala	Leu	Gly	Ala	Asn	Val	Glu	Leu	Trp	Ile	Met
			20				25						30	Leu
Leu	Gln	Val	Val	Arg	Glu	Gly	Lys	Phe	Ser	Gly	Phe	Leu	Thr	Ser
			35				40						45	Cys
Ser	Leu	Leu	Leu	Pro	Arg	Ala	Ala	Gln	Ile	Leu	Ala	Ala	Glu	Ala
			50				55						60	Gly
Leu	Pro	Ser	Ser	Arg	Ser	Phe	Met	Gly	Phe	Ala	Ala	Pro	Phe	Thr
														Asn

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 360
 cgacatgata tgatatgggt gttcttcatt ttgggctgta gtattttaaa gtagagggtt
 420
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 480
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 617

<210> 5436

<211> 119

<212> PRT

<213> Homo sapiens

<400> 5436

Met	Asn	Phe	Pro	Leu	Gly	Ser	Lys	Ala	Trp	Gly	Thr	Asn	Leu	Lys	Gln
1				5				10						15	
His	Pro	Leu	Ile	Ala	Arg	Ala	Lys	Gly	Lys	Thr	Met	Ala	Ser	Ser	Asp
		20					25						30		
Gly	Thr	Ile	Arg	Ala	Asn	Leu	Tyr	Phe	Lys	Ile	Leu	Gln	Pro	Lys	Met
	35					40					45				
Lys	Asn	Asn	His	Ile	Arg	Ser	Cys	Arg	Ala	Val	Leu	His	Arg	Ser	Asp
	50					55				60					
Leu	Leu	Val	Arg	Lys	Leu	Leu	Ala	Leu	Cys	Lys	Glu	Lys	Glu	Asp	Cys
65					70				75					80	
Asn	Arg	Asn	His	Glu	Pro	Gly	Arg	Glu	Met	Gly	Leu	Glu	Lys	Gly	Glu
			85					90						95	
Glu	Asn	Trp	Met	Ser	Asp	Ile	Ser	Glu	Thr	Gln	Asp	Pro	Phe	Leu	Gln
		100						105						110	
Tyr	Tyr	Ser	Thr	Ile	Val	Met									
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<210> 5437

<211> 1422

<212> DNA

<213> Homo sapiens

<400> 5437

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 180
 gctgaggctg gcttaccttc gagccgttcc ttcatgggat ttgctgctcc cttaccaaac
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 aagcgaaagg cttactcgga gcgtagaatc atgggggtact caatgcagga gatgtatgag
 300

<400> 5433

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120
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240
aacgcactctg ctcttcaccc ttcgctccgt ctgttttccc ttagcaaccc atctctttcc
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385

<210> 5434

<211> 128

<212> PRT

<213> Homo sapiens

<400> 5434

Asp	Leu	Thr	Asn	Leu	His	Tyr	Ser	Thr	Pro	Leu	Pro	Ala	Ser	Leu	Asp
1				5					10					15	
Thr	Thr	Asp	His	His	Phe	Gly	Ser	Met	Ser	Val	Gly	Asn	Ser	Val	Asn
			20					25					30		
Asn	Ile	Pro	Ala	Ala	Met	Thr	His	Leu	Gly	Ile	Arg	Ser	Ser	Ser	Gly
		35				40						45			
Leu	Gln	Ser	Ser	Arg	Ser	Asn	Pro	Ser	Ile	Gln	Ala	Thr	Leu	Asn	Lys
	50				55						60				
Thr	Val	Leu	Ser	Ser	Ser	Leu	Asn	Asn	His	Pro	Gln	Thr	Ser	Val	Pro
65					70					75				80	
Asn	Ala	Ser	Ala	Leu	His	Pro	Ser	Leu	Arg	Leu	Phe	Ser	Leu	Ser	Asn
				85					90					95	
Pro	Ser	Leu	Ser	Thr	Thr	Asn	Leu	Ser	Gly	Pro	Ser	Arg	Arg	Arg	Gln
			100					105					110		
Pro	Pro	Val	Ser	Pro	Leu	Thr	Leu	Ser	Pro	Gly	Pro	Glu	Ala	His	Gln
		115					120					125			

<210> 5435

<211> 617

<212> DNA

<213> Homo sapiens

<400> 5435

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120
ccttgataa gtatactttg tataacttct ggcaaaccat aattatgaac tcacattact
180
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240

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<210> 5433
<211> 385
<212> DNA
<213> Homo sapiens
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4614

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 1920
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 1980
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 2100
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<210> 5432

<211> 863

<212> PRT

<213> Homo sapiens

<400> 5432

Xaa	His	Asp	Val	Ile	Gln	Gln	Leu	Pro	Pro	Pro	His	Tyr	Arg	Thr	Leu
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Glu	Tyr	Leu	Leu	Arg	His	Leu	Ala	Arg	Met	Ala	Arg	His	Ser	Ala	Asn
			20					25					30		
Thr	Ser	Met	His	Ala	Arg	Asn	Leu	Ala	Ile	Val	Trp	Ala	Pro	Asn	Leu

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300
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<210> 5430

<211> 94

<212> PRT

<213> Homo sapiens

<400> 5430

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Val	Lys	Gln	Glu	Arg	Gly	Glu	Gly	Pro	Arg	Ala	Gly	Glu	Lys	Gly	Ser
		20					25					30			
His	Glu	Glu	Glu	Val	Arg	Val	Pro	Ala	Leu	Ser	Trp	Gly	Arg	Pro	Arg
	35					40					45				
Ala	Pro	Ala	Pro	Ala	Ser	Lys	Pro	Arg	Pro	Arg	Leu	Asp	Leu	Asn	Cys
	50					55					60				
Leu	Trp	Leu	Arg	Pro	Gln	Pro	Ile	Phe	Leu	Trp	Lys	Leu	Arg	Pro	Arg
65				70				75						80	
Pro	Val	Pro	Ala	Ala	Thr	Pro	Leu	Thr	Gly	Pro	Leu	Pro	Leu		
				85				90							

<210> 5431

<211> 3005

<212> DNA

<213> Homo sapiens

<400> 5431

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 gccattgtct gggcacccaa cctgctacgg tccatggagc tggagtcagt gggaatgggt
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65          70          75          80
Ser Asn Ile Gln Arg Leu Arg His Glu Phe Asp Ser Glu Arg Ile Pro
          85          90          95
Glu Leu

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<210> 5427
<211> 366
<212> DNA
<213> Homo sapiens
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<400> 5427
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120
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180
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240
tggatattggc agcaggaaca gcatttatgg aacagagggg aagacacatt caaggaatga
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gttgaa
366
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<210> 5428
<211> 101
<212> PRT
<213> Homo sapiens
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<400> 5428
Met Phe His Ser Leu Asn Val Ser Ser Pro Leu Phe His Lys Cys Cys
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Ser Cys Cys Gln Tyr Gln Phe Ile Tyr Phe Ser Asn Pro Asn Ile Pro
 20          25          30
Phe Gly His Ser Val Glu Asp Pro Ile Pro Ala Arg Met His Val Phe
 35          40          45
Ser Glu Tyr Leu Tyr Pro Phe Cys Pro Leu Met Tyr Pro Gln His Leu
 50          55          60
Glu Glu His Leu Ala Cys Ser Arg Tyr Ser Thr Arg Ile Phe Asp Leu
 65          70          75          80
Phe Val Gly Leu Phe Met Thr Glu Ser Cys Ser Val Ala Gln Thr Gly
 85          90          95
Val Gln Tyr Ser Asp
 100

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<210> 5429
<211> 612
<212> DNA
<213> Homo sapiens
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<400> 5429

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<400> 5426
Pro Gln Leu Cys His Gly Leu Val Gly Ser Trp Pro Ala Cys Ser Ala
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Pro Ser Cys Ala Pro Ala Leu Leu Gly Ser Gly Cys Gly Ser Gly Glu
 20              25              30
Ser Cys Asp Arg Gly Cys Leu Ala Ala Ile Leu Ala Ser Thr Ser Ala
 35              40              45
Thr Gln Ala Arg Met Cys Pro Val Leu Arg Cys Cys Ser Glu Phe Ile
 50              55              60
Glu Ala Xaa Gly Val Val Asp Gly Ile Tyr Arg Leu Ser Gly Val Ser

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65					70					75				80
Ala	Ser	Thr	Pro	Gln	Ser	Gln	Cys	Leu	Pro	Ser	Glu	Ile	Glu	Val Lys
				85					90					95
Tyr	Lys	Met	Ala	Glu	Cys	Tyr	Thr	Met	Leu	Lys	Gln	Asp	Lys	Asp Ala
			100					105					110	
Ile	Ala	Ile	Leu	Asp	Gly	Ile	Pro	Ser	Arg	Gln	Arg	Thr	Pro	Lys Ile
		115				120						125		
Asn	Met	Met	Leu	Ala	Asn	Leu	Tyr	Lys	Lys	Ala	Gly	Gln	Glu	Arg Pro
	130					135					140			
Ser	Val	Thr	Ser	Tyr	Lys	Glu	Val	Leu	Arg	Gln	Cys	Pro	Leu	Ala Leu
145					150					155				160
Asp	Ala	Ile	Leu	Gly	Leu	Leu	Ser	Leu	Ser	Val	Lys	Gly	Ala	Glu Val
			165					170						175
Ala	Ser	Met	Thr	Met	Asn	Val	Ile	Gln	Thr	Val	Pro	Asn	Leu	Asp Trp
			180					185					190	
Leu	Ser	Val	Trp	Ile	Lys	Ala	Tyr	Ala	Phe	Val	His	Thr	Gly	Asp Asn
	195					200						205		
Ser	Arg	Ala	Ile	Ser	Thr	Ile	Cys	Ser	Leu	Glu	Lys	Lys	Ser	Leu Leu
	210				215						220			
Arg	Asp	Asn	Val	Asp	Leu	Gly	Ser	Leu	Ala	Asp	Leu	Tyr	Phe	Arg
225					230				235					240
Ala	Gly	Asp	Asn	Lys	Asn	Ser	Val	Leu	Lys	Phe	Glu	Gln	Ala	Gln Met
			245					250						255
Leu	Asp	Pro	Tyr	Leu	Ile	Lys	Gly	Met	Asp	Val	Tyr	Gly	Tyr	Leu Leu
		260						265				270		
Ala	Arg	Glu	Gly	Arg	Leu	Glu	Asp	Val	Glu	Asn	Leu	Gly	Cys	Arg Leu
		275					280					285		
Phe	Asn	Ile	Ser	Asp	Gln	His	Ala	Glu	Pro	Trp	Val	Val	Ser	Gly Cys
	290					295					300			
His	Ser	Phe	Tyr	Ser	Lys	Arg	Tyr	Ser	Arg	Ala	Leu	Tyr	Leu	Gly Ala
305					310					315				320
Lys	Ala	Ile	Gln	Leu	Asn	Ser	Asn	Ser	Val	Gln	Ala	Leu	Leu	Leu Lys
			325					330						335
Gly	Ala	Ala	Leu	Arg	Asn	Met	Gly	Arg	Val	Gln	Glu	Ala	Ile	Ile His
		340					345					350		
Phe	Arg	Glu	Ala	Ile	Arg	Leu	Ala	Pro	Cys	Arg	Leu	Asp	Cys	Tyr Glu
		355				360						365		
Gly	Leu	Ile	Glu	Cys	Tyr	Leu	Ala	Ser	Asn	Ser	Ile	Arg	Glu	Ala Met
	370					375					380			
Val	Met	Ala	Asn	Asn	Val	Tyr	Lys	Thr	Leu	Gly	Ala	Asn	Ala	Gln Thr
385					390					395				400
Leu	Thr	Leu	Leu	Ala	Thr	Val	Cys	Leu	Glu	Asp	Pro	Val	Thr	Gln Glu
			405					410						415
Lys	Ala	Lys	Thr	Leu	Leu	Asp	Lys	Ala	Leu	Thr	Gln	Arg	Pro	Asp Tyr
			420					425				430		
Ile	Lys	Ala	Val	Val	Lys	Lys	Ala	Glu	Leu	Leu	Ser	Arg	Glu	Gln Lys
		435					440					445		
Tyr	Glu	Asp	Gly	Ile	Ala	Leu	Leu	Arg	Asn	Ala	Leu	Ala	Asn	Gln Ser
	450					455					460			
Asp	Cys	Val	Leu	His	Arg	Ile	Leu	Gly	Asp	Phe	Leu	Val	Ala	Val Asn
465					470					475				480
Glu	Tyr	Gln	Glu	Ala	Met	Asp	Gln	Tyr	Ser	Ile	Ala	Leu	Ser	Leu Asp
			485					490						495
Pro	Asn	Asp	Gln	Lys	Ser	Leu	Glu	Gly	Met	Gln	Lys	Met	Glu	Lys Glu

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<210> 5424

<211> 570

<212> PRT

<213> Homo sapiens

<400> 5424

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Leu	Leu	Thr	Met	Ser	Asn	Asn	Asn	Pro	Glu	Leu	Phe	Ser	Pro	Gln
			20					25				30		
Lys	Tyr	Gln	Leu	Leu	Val	Tyr	His	Ala	Asp	Ser	Leu	Phe	His	Asp
		35				40						45		Lys
Glu	Tyr	Arg	Asn	Ala	Val	Ser	Lys	Tyr	Thr	Met	Ala	Leu	Gln	Gln
	50					55					60			Lys
Lys	Ala	Leu	Ser	Lys	Thr	Ser	Lys	Val	Arg	Pro	Ser	Thr	Gly	Asn
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260
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275

265

270

<210> 5423
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<212> DNA
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<211> 276

<212> PRT

<213> Homo sapiens

<400> 5422

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Thr	Gln	Pro	Leu	Gly	Leu	Leu	Arg	Leu	Leu	Gln	Leu	Val	Ser	Thr	Cys
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Val	Ala	Phe	Ser	Leu	Val	Ala	Ser	Val	Gly	Ala	Trp	Thr	Gly	Ser	Met
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Ser	Trp	Arg	Asn	Phe	Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu	Phe
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Arg Thr Pro Phe Arg Leu Ser Glu Lys Asp Arg Met Glu Leu Leu Glu
      115                120                125
Ile Ala Lys Thr Asn Ala Ala Lys Ala Leu Gly Thr Thr Asn Ile Asp
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<210> 5421

<211> 1239

<212> DNA

<213> Homo sapiens

<400> 5421

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<210> 5420
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<211> 528

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<213> Homo sapiens

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<210> 5416
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 <212> PRT
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<210> 5417
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<212> DNA

<213> Homo sapiens

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<211> 426

<212> PRT

<213> Homo sapiens

<400> 5414

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Ser Gln Leu Asp Arg Asn Leu Asp Arg Glu Met Lys Pro Asp Pro Thr
      405              410              415
Pro Leu Leu Thr Ser Arg His Asn Val Phe Gln Asn Asp Glu Phe Asp
      420              425              430
Val Phe Ser Arg Asp Ser Val Asp Leu Ser Arg Val His Lys Gly Lys
      435              440              445
Ser Thr Arg Lys Glu Glu Asn Thr Arg Ser Leu Leu Asn Asp Lys Arg
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465              470              475              480
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Tyr Tyr Glu Asp Glu Tyr Asp Asp Thr Tyr Asp Gly Asn Gln Val Gly
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Pro Ser Gln Val Leu Arg Thr Lys Val Pro Arg Glu Gly Gln Glu Glu
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Asp Asp Asp Asp Glu Glu Asp Asp Ala Asp Glu Glu Ala Pro Lys Pro
545              550              555              560
Asp His Phe Val Gln Asp Pro Ala Val Leu Arg Glu Lys Ala Glu Ala
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Arg Arg Met Ala Phe Leu Ala Lys Lys Gly Tyr Arg His Asp Ser Ser
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Thr Ala Val Ala Gly Ser Pro Arg Gly His Gly Gln Ser Arg Glu Thr
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<211> 1677

<212> DNA

<213> Homo sapiens

<400> 5413

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 Met Ile Gly Asn Ile Phe Thr Gln Gln Pro Ser Tyr Tyr Ser Asp Leu
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 Asp Glu Thr Leu Pro Thr Ile Leu Gln Val Phe Ser Asn Ile Leu Gln
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 Glu Ser Ala Ile Lys Lys Arg Arg Leu Glu Asp Ser Lys Leu Leu Gly
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 Phe His Ile Ile Leu Asn Gln Ile Cys Leu Leu Pro Ile Leu Glu Ser
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 Glu Cys Met Gly Ala Ala Ala Ala Val Gly Pro Ala Met Cys Gly Val
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 Gly Glu Gly Phe Ile Leu Ala Cys Leu Glu Tyr Tyr His Tyr Asp Pro

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2802

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<211> 2802

<212> DNA

<213> Homo sapiens

<400> 5411

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<211> 198

<212> PRT

<213> Homo sapiens

<400> 5410

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			20					25					30		
Gln	Ile	Glu	Gln	Gly	Met	Asp	Met	Val	Ile	Ser	Ser	Val	Ile	Gly	Glu
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Ser	Tyr	Arg	Leu	Gln	Ser	Met	Gln	Cys	Ser	Ser	Leu	Phe	Gln	Phe	Asp
	50					55					60				
Phe	Gln	Glu	Ala	Val	Lys	Asn	Phe	Phe	Pro	Pro	Gly	Asn	Glu	Val	Val
65					70				75					80	
Asn	Gly	Glu	Asn	Leu	Ser	Phe	Ala	Tyr	Glu	Phe	Lys	Ala	Asp	Ala	Leu
			85					90					95		
Phe	Asp	Phe	Phe	Tyr	Trp	Phe	Gly	Leu	Ser	Asn	Ser	Val	Val	Lys	Val
			100				105					110			
Asn	Gly	Lys	Val	Leu	Asn	Leu	Ser	Ser	Thr	Ser	Pro	Glu	Lys	Lys	Glu
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Thr	Ile	Lys	Leu	Phe	Leu	Glu	Lys	Met	Ser	Glu	Pro	Leu	Ile	Arg	Arg
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<210> 5409

<211> 2019

<212> DNA

<213> Homo sapiens

<400> 5409

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<210> 5408

<211> 335

<212> PRT

<213> Homo sapiens

<400> 5408

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Lys	Glu	Met	Val	Leu	Ser	Glu	Lys	Val	Ser	Gln	Leu	Met	Glu	Trp	Thr
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 <212> PRT
 <213> Homo sapiens

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 50 55 60
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 65 70 75 80
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 85 90 95
 His Ile Ala Ser Gly Lys Lys Cys Gln Tyr Val Gly Asn Cys Ser Phe
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 115 120 125
 Gly Ile Gln Asp Met Glu Gln Phe Tyr Glu Leu Trp Leu Lys Ser Gln
 130 135 140
 Lys Asn Glu Lys Ser Glu Asp Ile Ala Ser Gln Ser Asn Lys Glu Asn
 145 150 155 160
 Gly Lys Gln Ile His Met Pro Thr Asp Tyr Ala Glu Val Thr Val Asp
 165 170 175
 Phe His Cys Trp Met Cys Gly Lys Asn Cys Asn Ser Glu Lys Gln Trp
 180 185 190
 Gln Gly His Ile Ser Ser Glu Lys His Lys Glu Lys Val Phe His Thr
 195 200 205
 Glu Asp Asp Gln Tyr Cys Trp Gln His Arg Phe Pro Thr Gly Tyr Phe
 210 215 220
 Ser Ile Cys Asp Arg Tyr Met Asn Gly Thr Cys Pro Glu Gly Asn Ser
 225 230 235 240
 Cys Lys Phe Ala His Gly Asn Ala Glu Leu His Glu Trp Glu Glu Arg
 245 250 255
 Arg Asp Ala Leu Lys Met Lys Leu Asn Lys Ala Arg Lys Asp His Leu
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<210> 5407
 <211> 2010
 <212> DNA
 <213> Homo sapiens

<400> 5407
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60
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120
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180
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240
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300
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360
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420
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480
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540
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720
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780
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1140
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1260
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<212> DNA

<213> Homo sapiens

<400> 5403

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 180
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 300
 agccggggcca ggaggccaaa atctgctgag ctctcgctga tccctggtac cagcacacgg
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<210> 5404

<211> 150

<212> PRT

<213> Homo sapiens

<400> 5404

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			20					25					30		
Ser	Pro	Ala	Leu	Thr	Met	Ala	Pro	Ser	Ser	Leu	Gly	Ala	Leu	Gly	Pro
		35					40					45			
Trp	Val	Gly	Ala	Leu	Glu	Leu	Pro	Arg	Leu	Gln	Ala	Pro	Leu	Ser	Gln
	50					55					60				
Pro	Gly	Thr	His	Ala	Gly	Ala	Xaa	Asp	Pro	Arg	Pro	Ser	Leu	Arg	Lys
65				70				75						80	
Ala	Ser	Leu	Arg	Ala	Ala	Ser	Pro	Ala	Ala	Ser	Ser	Ser	Pro	Trp	Ala
			85					90						95	
Arg	Val	Pro	Cys	Ser	Arg	Ala	Arg	Arg	Pro	Lys	Ser	Ala	Glu	Leu	Leu
			100					105					110		
Arg	Ile	Pro	Gly	Thr	Ser	Thr	Arg	Pro	Lys	Lys	Glu	Arg	Gly	Cys	Pro
		115					120					125			
Ser	Pro	Gly	Leu	Pro	Ala	Ala	Gly	Pro	Gly	Pro	Ser	Pro	Ala	Gly	Arg
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145						150									

<210> 5405

<211> 1609

<212> DNA

<213> Homo sapiens

<400> 5405

<210> 5403
<211> 451

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 1800
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 1860
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 1920
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 1980
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 2040
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 2100
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 2160
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 2220
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 2340
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 2460
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 2520
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 2580
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<210> 5402

<211> 507

<212> PRT

<213> Homo sapiens

<400> 5402

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Phe	Lys	Ala	Arg	Pro	Arg	Glu	Phe	Trp	Ala	Arg	Cys	Lys	Arg	Pro	Cys
			20					25					30		
Pro	Arg	His	Val	Ala	Asp	Met	Val	Ile	Ser	Glu	Ser	Met	Asp	Ile	Leu
			35				40					45			
Phe	Arg	Ile	Arg	Gly	Gly	Leu	Asp	Leu	Ala	Phe	Gln	Leu	Ala	Thr	Pro
			50			55					60				
Asn	Glu	Ile	Phe	Leu	Lys	Lys	Ala	Leu	Lys	His	Val	Leu	Ser	Asp	Leu
65				70						75				80	
Ser	Thr	Lys	Leu	Ser	Ser	Asn	Ala	Leu	Val	Phe	Arg	Ile	Cys	His	Ser
				85					90					95	
Ser	Val	Tyr	Ile	Trp	Pro	Ser	Ser	Asp	Ile	Asn	Thr	Ile	Pro	Gly	Glu

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180
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240
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300
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360
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420
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720
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1680

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 720
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<210> 5400

<211> 186

<212> PRT

<213> Homo sapiens

<400> 5400

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Gly	Pro	Thr	Met	Gly	Arg	Ser	Gln	Gly	Ser	Pro	Met	Asp	Pro	Met	Val
		20					25					30			
Met	Lys	Arg	Pro	Gln	Leu	Tyr	Gly	Met	Gly	Ser	Asn	Pro	His	Ser	Gln
		35					40					45			
Pro	Gln	Gln	Ser	Ser	Pro	Tyr	Pro	Gly	Gly	Ser	Tyr	Gly	Pro	Pro	Gly
	50					55				60					
Pro	Gln	Arg	Tyr	Pro	Ile	Gly	Ile	Gln	Gly	Arg	Thr	Pro	Gly	Ala	Met
65					70					75					80
Ala	Gly	Met	Gln	Tyr	Pro	Gln	Gln	Gln	Met	Pro	Pro	Gln	Tyr	Gly	Gln
			85						90					95	
Gln	Gly	Val	Ser	Gly	Tyr	Cys	Gln	Gln	Gly	Gln	Gln	Pro	Tyr	Tyr	Ser
			100						105				110		
Gln	Gln	Pro	Gln	Pro	Pro	His	Leu	Pro	Pro	Gln	Ala	Gln	Tyr	Leu	Pro
		115					120					125			
Ser	Gln	Ser	Gln	Gln	Arg	Tyr	Gln	Pro	Gln	Gln	Asp	Met	Ser	Gln	Glu
	130					135					140				
Gly	Tyr	Gly	Thr	Arg	Ser	Gln	Pro	Pro	Leu	Ala	Pro	Gly	Lys	Pro	Asn
145					150					155					160
His	Glu	Asp	Leu	Asn	Leu	Ile	Gln	Gln	Glu	Arg	Pro	Ser	Ser	Leu	Pro
			165						170					175	
Val	Arg	His	Tyr	Cys	Ala	Asp	Leu	Glu	Met						
			180					185							

<210> 5401

<211> 2674

<212> DNA

<213> Homo sapiens

<400> 5401

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<210> 5398

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5398

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Asp	Ala	Ile	His	Ser	Ala	Gly	Thr	Tyr	Ala	His	Asp	Gln	Leu	Ser	Gln
			20					25					30		
Thr	Ser	Ile	Pro	Ile	Ser	Pro	Pro	Leu	Thr	Pro	Gln	Asp	Ala	Asn	Glu
		35					40					45			
Ala	Gln	Gly	Trp	Ala	Glu	Ala	Gly	Arg	Ala	Val	His	Arg	Glu	Asp	Pro
	50					55					60				
Arg	Val	Ser	Leu	Gly	Leu	Pro	Arg	Trp	Leu	Cys	Pro	Pro	Phe	Cys	Leu
65					70					75					80
Gly	Gly	Ser	Leu	Arg	Leu	Gly	Arg	Ala	Gln	Arg	Glu	Gly	Asp	Pro	Glu
				85					90					95	
Gly	Leu	Ala	Asp	Ser	Gly	Pro	Pro	Cys	Glu	Leu	Arg	Phe	Glu	Glu	Glu
			100					105					110		
Ser	Arg	Pro	Pro	Arg	Val	Val	Gly	Glu	Ser	Thr	Gly	Arg	Lys	Ala	Gly
		115					120					125			
Ile	Ser	Thr	Glu	Gly	Leu	Ser	Ala	Ser	Phe	Asp	Leu	Phe	Gln	Ser	Phe
	130					135					140				
Arg	Val	Met	Asn	Gln	Ile	Ala	Phe	Met	Arg						
145					150										

<210> 5399

<211> 835

<212> DNA

<213> Homo sapiens

<400> 5399

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 120
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 180
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 240
 gccggaatgc agtacctca gcagcagatg ccacctcagt atggacagca aggtgtgagt
 300
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 360
 ccaccccagg cgcagtatct gccgtcccag tcccagcaga ggtaccagcc gcagcaggac
 420

500							505							510						
Ala	Ser	Ser	Gln	Gln	Glu	Lys	Glu	Asp	Lys	Pro	Ala	Glu	Thr	Lys	Lys					
515							520							525						
Leu	Arg	Ile	Ala	Trp	Pro	Pro	Pro	Thr	Glu	Leu	Gly	Ser	Ser	Gly	Ser					
530							535							540						
Ala	Leu	Glu	Glu	Gly	Ile	Lys	Met	Ser	Lys	Pro	Lys	Trp	Pro	Pro	Glu					
545							550							555						
Asp	Glu	Ile	Ser	Lys	Pro	Glu	Val	Pro	Glu	Asp	Val	Asp	Leu	Asp	Leu					
565							570							575						
Lys	Lys	Leu	Arg	Arg	Ser	Ser	Ser	Leu	Lys	Glu	Arg	Ser	Arg	Pro	Phe					
580							585							590						
Thr	Val	Ala	Ala	Ser	Phe	Gln	Ser	Thr	Ser	Val	Lys	Ser	Pro	Lys	Thr					
595							600							605						
Val	Ser	Pro	Pro	Ile	Arg	Lys	Gly	Trp	Ser	Met	Ser	Glu	Gln	Ser	Glu					
610							615							620						
Glu	Ser	Val	Gly	Gly	Arg	Val	Ala	Glu	Arg	Lys	Gln	Val	Glu	Asn	Ala					
625							630							635						
Lys	Ala	Ser	Lys	Lys	Asn	Gly	Asn	Val	Gly	Lys	Thr	Thr	Trp	Gln	Asn					
645							650							655						
Lys	Glu	Ser	Lys	Gly	Glu	Thr	Gly	Lys	Arg	Ser	Lys	Glu	Gly	His	Ser					
660							665							670						
Leu	Glu	Met	Glu	Asn	Glu	Asn	Leu	Val	Glu	Asn	Gly	Ala	Asp	Ser	Asp					
675							680							685						
Glu	Asp	Asp	Asn	Ser	Phe	Leu	Lys	Gln	Gln	Ser	Pro	Gln	Glu	Pro	Lys					
690							695							700						
Ser	Leu	Asn	Trp	Ser	Ser	Phe	Val	Asp	Asn	Thr	Phe	Ala	Glu	Glu	Phe					
705							710							715						
Thr	Thr	Gln	Asn	Gln	Lys	Ser	Gln	Asp	Val	Glu	Leu	Trp	Glu	Gly	Glu					
725							730							735						
Val	Val	Lys	Glu	Leu	Ser	Val	Glu	Glu	Gln	Ile	Lys	Arg	Asn	Arg	Tyr					
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<210> 5397

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5397

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240
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420
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4579

aacaaaaaaaa cacaacaaac acatttctaaa tactagagat aactttactt aaattcttca
 2640
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 2940
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 3180
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 3240
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<210> 5396

<211> 760

<212> PRT

<213> Homo sapiens

<400> 5396

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Arg	Val	Thr	Ala	Lys	Glu	Leu	Ser	Leu	Val	Asn	Lys	Asn	Lys	Ser	Ser
			20					25					30		
Ala	Ile	Val	Glu	Ile	Phe	Ser	Lys	Tyr	Gln	Lys	Ala	Ala	Glu	Glu	Thr
		35					40					45			
Asn	Met	Glu	Lys	Lys	Arg	Ser	Asn	Thr	Glu	Asn	Leu	Ser	Gln	His	Phe
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<212> PRT

<213> Homo sapiens

<400> 5394

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<211> 4837

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens
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cagcctggcc tcctcgcccc ctacgtgca cccaccttcc acttcctgga gatgcaacca
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<210> 5386
<211> 100
<212> PRT
<213> Homo sapiens
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<400> 5386
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Thr Trp Ser Ile Cys Cys Ser Trp Asn Arg Lys Glu Arg Ser Lys Lys
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Ser Val Pro Ser Pro Pro Arg Ala Gln Pro Leu Gly Arg Gly Leu His
 35                40              45
Ala Gly Trp Leu Ala Arg Leu Gly Gln Pro Gly Leu Leu Gly Pro Tyr
 50                55              60
Ala Ala Pro Thr Phe His Phe Leu Glu Met His Pro His Leu Gln Glu
65                70              75              80
Asn Cys Phe Arg Lys Cys Leu Gln His Ser Arg Glu Trp Asn Lys Gln
 85                90              95
Gly Pro Asn Ala
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<210> 5387
<211> 375
<212> DNA
<213> Homo sapiens
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120
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      50              55              60
Arg Ala Val Pro Arg Asn Val Gln Pro Tyr Val Val Tyr Glu Glu Val
65              70              75              80
Thr Asn Val Trp Ile Asn Val His Asp Ile Phe Tyr Pro Phe Pro Gln
      85              90              95
Ser Glu Gly Glu Asp Glu Leu Cys Phe Leu Arg Ala Asn Glu Cys Lys
      100              105              110
Thr Gly Phe Cys His Leu Tyr Lys Val Thr Ala Val Leu Lys Ser Gln
      115              120              125
Gly Tyr Asp Trp Ser Glu Pro Phe Ser Pro Gly Glu Gly Glu Gln Ser
      130              135              140
Leu Thr Asn Ala Ile Trp Val Asn Glu Glu Thr Lys Leu Val Tyr Phe
145              150              155              160
Gln Gly Thr Lys Asp Thr Pro Leu Glu His His Leu Tyr Val Val Ser
      165              170              175
Tyr Glu Ala Ala Gly Glu Ile Val Arg Leu Thr Thr Pro Gly Phe Ser
      180              185              190
His Ser Cys Ser Met Ser Gln Asn Phe Asp Met Phe Val Ser His Tyr
      195              200              205
Ser Ser Val Ser Thr Pro Pro Cys Val His Val Tyr Lys Leu Ser Gly
      210              215              220
Pro Asp Asp Asp Pro Leu His Lys Gln Pro Arg Phe Trp Ala Ser Met
225              230              235              240
Met Glu Ala Ala Lys Ile Phe His Phe His Thr Arg Ser Asp Val Arg
      245              250              255
Leu Tyr Gly Met Ile Tyr Lys Pro His Ala Leu Gln Pro Gly Lys Lys
      260              265              270
His Pro Thr Val Leu Phe Val Tyr Gly Gly Pro Gln Val Gln Leu Val
      275              280              285
Asn Asn Ser Phe Lys Gly Ile Lys Tyr Leu Arg Leu Asn Thr Leu Ala
      290              295              300
Ser Leu Gly Tyr Ala Val Val Val Ile Asp Gly Arg Gly Ser Cys Gln
305              310              315              320
Arg Gly Leu Arg Phe Glu Gly Ala Leu Lys Asn Gln Met Gly Gln Val
      325              330              335
Glu Ile Glu Asp Gln Val Glu Gly Leu Gln Phe Val Ala Glu Lys Tyr
      340              345              350
Gly Phe Ile Asp Leu Ser Arg Val Ala Ile His Gly Trp Ser Tyr Gly
      355              360              365
Gly Phe Leu Ser Leu Met Gly Leu Ile His Lys Pro Gln Val Phe Lys
      370              375              380
Val Ala Ile Ala Gly Ala Pro Val Thr Val Trp Met Ala Tyr Asp Thr
385              390              395              400
Gly Tyr Thr Glu Arg Tyr Met Asp Val Pro Glu Asn Asn Gln His Gly
      405              410              415
Tyr Glu Ala Gly Ser Val Ala Leu His Val Glu Lys Leu Pro Asn Glu
      420              425              430
Pro Asn Arg Leu Leu Ile Leu His Gly Phe Leu Asp Glu Asn Val His
      435              440              445
Phe Phe His Thr Asn Phe Leu Val Ser Gln Leu Ile Arg Ala Gly Lys
      450              455              460
Pro Tyr Gln Leu Gln Val Ala Leu Pro Pro Val Ser Pro Gln Ile Tyr
465              470              475              480
Pro Asn Glu Arg His Ser Ile Arg Cys Pro Glu Ser Gly Glu His Tyr

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 1680
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 1920
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 2027

<210> 5384

<211> 508

<212> PRT

<213> Homo sapiens

<400> 5384

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 Phe Pro Lys Val Glu Tyr Ile Ala Arg Ala Gly Ala Trp Ala Met Phe
 20 25 30
 Leu Asp Arg Pro Gln Gln Trp Leu Gln Leu Val Leu Pro Pro Ala
 35 40 45
 Leu Phe Ile Pro Ser Thr Glu Asn Glu Glu Gln Arg Leu Ala Ser Ala

```

65          70          75          80
Gly Arg Met Asp Asp Val Ile Asn Ile Ser Gly His Arg Leu Gly Thr
          85          90          95
Ala Glu Ile Glu Asp Ala Ile Ala Asp His Pro Ala Val Pro Glu Ser
          100          105          110
Ala Val Ile Gly Tyr Pro His Asp Ile Lys Gly Glu Ala Ala Phe Ala
          115          120          125
Phe Ile Val Val Lys Asp Ser Ala Gly Asp Ser Asp Val Val Val Gln
          130          135          140
Glu Leu Lys Ser Met Val Ala Thr Lys Ile Ala Lys Tyr Ala Val Pro
145          150          155          160
Asp Glu Ile Leu Val Val Lys Arg Leu Pro Lys Thr Arg Ser Gly Lys
          165          170          175
Val Met Arg Arg Leu Leu Arg Lys Ile Ile Thr Ser Glu Ala Gln Glu
          180          185          190
Leu Gly Asp Thr Thr Thr Leu Glu Asp Pro Ser Ile Ile Ala Glu Ile
          195          200          205
Leu Ser Val Tyr Gln Lys Cys Lys Asp Lys Gln Ala Ala Ala Lys
          210          215          220

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<210> 5383

<211> 2027

<212> DNA

<213> Homo sapiens

<400> 5383

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840

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<210> 5382

<211> 223

<212> PRT

<213> Homo sapiens

<400> 5382

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 Ile Ser Gln Ala Trp Pro Gly Met Ala Arg Thr Ile Tyr Gly Asp His
 35 40 45
 Gln Arg Phe Val Asp Ala Tyr Phe Lys Ala Tyr Pro Gly Tyr Tyr Phe
 50 55 60
 Thr Gly Asp Gly Ala Tyr Arg Thr Glu Gly Gly Tyr Tyr Gln Ile Thr

660 665 670
 Pro Pro Ser Phe Gln Pro Ser Ser Pro Ala Pro Val Trp Arg Ser Ser
 675 680 685
 Leu Gly Pro Pro Ala Pro Leu Asp Arg Gly Glu Asn Leu Tyr Tyr Glu
 690 695 700
 Ile Gly Ala Ser Glu Gly Ser Pro Tyr Ser Gly Pro Thr Arg Ser Trp
 705 710 715 720
 Ser Pro Phe Arg Ser Met Pro Pro Asp Arg Leu Asn Ala Ser Tyr Gly
 725 730 735
 Met Leu Gly Gln Ser Pro Pro Leu His Arg Ser Pro Asp Phe Leu Leu
 740 745 750
 Ser Tyr Pro Pro Ala Pro Ser Cys Phe Pro Pro Asp His Leu Gly Tyr
 755 760 765
 Ser Ala Pro Gln His Pro Ala Arg Arg Pro Thr Pro Pro Glu Pro Leu
 770 775 780
 Tyr Val Asn Leu Ala Leu Gly Pro Arg Gly Pro Ser Pro Ala Ser Ser
 785 790 795 800
 Ser Ser Ser Ser Pro Pro Ala His Pro Arg Ser Arg Ser Asp Pro Gly
 805 810 815
 Pro Pro Val Pro Arg Leu Pro Gln Lys Gln Arg Ala Pro Trp Gly Pro
 820 825 830
 Arg Thr Pro His Arg Val Pro Gly Pro Trp Gly Pro Pro Glu Pro Leu
 835 840 845
 Leu Leu Tyr Arg Ala Ala Pro Pro Ala Tyr Gly Arg Gly Gly Glu Leu
 850 855 860
 His Arg Gly Ser Leu Tyr Arg Asn Gly Gly Gln Arg Gly Glu Gly Ala
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 Gly Pro Pro Pro Pro Tyr Pro Thr Pro Ser Trp Ser Leu His Ser Glu
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<210> 5381

<211> 1576

<212> DNA

<213> Homo sapiens

<400> 5381

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225														230														235														240
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Leu	Asp	Pro	Ala	Gly	Arg	Cys	Leu	Leu	Pro	Arg	Pro	Lys	Ser	Leu	Ala																											
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Gly	Ser	Cys	Pro	Ser	Thr	Arg	Leu	Leu	Thr	Leu	Glu	Glu	Ala	Gln	Ala																											
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Arg	Thr	Gln	Gly	Arg	Leu	Gly	Thr	Pro	Thr	Glu	Pro	Thr	Thr	Pro	Lys																											
				290														295														300										
Ala	Pro	Ala	Ser	Pro	Ala	Glu	Arg	Arg	Lys	Gly	Glu	Arg	Gly	Glu	Lys																											
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Gln	Arg	Lys	Pro	Gly	Gly	Ser	Ser	Trp	Lys	Thr	Phe	Phe	Ala	Leu	Gly																											
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Arg	Gly	Pro	Ser	Val	Pro	Arg	Lys	Lys	Pro	Leu	Pro	Trp	Leu	Gly	Gly																											
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Thr	Arg	Ala	Pro	Pro	Gln	Pro	Ser	Ala	Trp	Leu	Asp	Asp	Gly	Asp	Glu																											
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Leu	Asp	Phe	Ser	Pro	Pro	Arg	Cys	Leu	Glu	Gly	Leu	Arg	Gly	Leu	Asp																											
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Phe	Asp	Pro	Leu	Thr	Phe	Arg	Cys	Ser	Ser	Pro	Thr	Pro	Gly	Asp	Pro																											
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Ala	Pro	Pro	Ala	Ser	Pro	Ala	Pro	Pro	Ala	Pro	Ala	Ser	Ala	Phe	Pro																											
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Pro	Arg	Val	Thr	Pro	Gln	Ala	Ile	Ser	Pro	Arg	Gly	Pro	Thr	Ser	Pro																											
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Ala	Ser	Pro	Ala	Ala	Leu	Asp	Ile	Ser	Glu	Pro	Leu	Ala	Val	Ser	Val																											
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Pro	Pro	Ala	Val	Leu	Glu	Leu	Leu	Gly	Ala	Gly	Gly	Ala	Pro	Ala	Ser																											
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Ala	Thr	Pro	Thr	Pro	Ala	Leu	Ser	Pro	Gly	Arg	Ser	Leu	Arg	Pro	His																											
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Leu	Ile	Pro	Leu	Leu	Leu	Arg	Gly	Ala	Glu	Ala	Pro	Leu	Thr	Asp	Ala																											
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Cys	Gln	Gln	Glu	Met	Cys	Ser	Lys	Leu	Arg	Gly	Ala	Gln	Gly	Pro	Leu																											
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Ala	Arg	Leu	Met	Ala	Leu	Ala	Leu	Ala	Glu	Arg	Ala	Gln	Gln	Val	Ala																											
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Glu	Gln	Gln	Ser	Gln	Gln	Glu	Cys	Gly	Gly	Thr	Pro	Pro	Ala	Ser	Gln																											
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Ser	Pro	Phe	His	Arg	Ser	Leu	Ser	Leu	Glu	Val	Gly	Gly	Glu	Pro	Leu																											
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Gly	Thr	Ser	Gly	Ser	Gly	Pro	Pro	Pro	Asn	Ser	Leu	Ala	His	Pro	Gly																											
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Ala	Trp	Val	Pro	Gly	Pro	Pro	Pro	Tyr	Leu	Pro	Arg	Gln	Gln	Ser	Asp																											
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Gly	Ser	Leu	Leu	Arg	Ser	Gln	Arg	Pro	Met	Gly	Thr	Ser	Arg	Arg	Gly																											
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<210> 5380

<211> 903

<212> PRT

<213> Homo sapiens

<400> 5380

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 35 40 45
 Cys Asp Arg Gly Cys Leu Ala Ala Ile Leu Ala Ser Thr Ser Ala Thr
 50 55 60
 Gln Ala Arg Met Val Leu Arg Cys Cys Ser Glu Phe Ile Glu Ala His
 65 70 75 80
 Gly Val Val Asp Gly Ile Tyr Arg Leu Ser Gly Val Ser Ser Asn Ile
 85 90 95
 Gln Arg Leu Arg His Glu Phe Asp Ser Glu Arg Ile Pro Glu Leu Ser
 100 105 110
 Gly Pro Ala Phe Leu Gln Asp Ile His Ser Val Ser Ser Leu Cys Lys
 115 120 125
 Leu Tyr Phe Arg Glu Leu Pro Asn Pro Leu Leu Thr Tyr Gln Leu Tyr
 130 135 140
 Gly Lys Phe Ser Glu Ala Met Ser Val Pro Gly Glu Glu Glu Arg Leu
 145 150 155 160
 Val Arg Val His Asp Val Ile Gln Gln Leu Pro Pro Pro His Tyr Arg
 165 170 175
 Thr Leu Glu Tyr Leu Leu Arg His Leu Ala Arg Met Ala Arg His Ser
 180 185 190
 Ala Asn Thr Ser Met His Ala Arg Asn Leu Ala Ile Val Trp Ala Pro
 195 200 205
 Asn Leu Leu Arg Ser Met Glu Leu Glu Ser Val Gly Met Gly Gly Ala
 210 215 220
 Ala Ala Phe Arg Glu Val Arg Val Gln Ser Val Val Val Glu Phe Leu

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2700

290 295 300
 Lys Thr Ile Ala Leu Asn Gly Val Glu Asp Val Arg Thr Val Leu Glu
 305 310 315 320
 His Tyr Ala Leu Glu Asp Asp Pro Leu Ala Ala Phe Lys Gln Arg Gln
 325 330 335
 Ser Arg Leu Glu Gln Glu Glu Gln Arg Leu Ala Glu Leu Ser Lys
 340 345 350
 Ser Asn Lys Gln Asn Leu Phe Leu Gly Ser Leu Thr Ser Arg Leu Trp
 355 360 365
 Pro Arg Ser Lys Gln Pro
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<210> 5379
 <211> 3213
 <212> DNA
 <213> Homo sapiens

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<400> 5378

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<212> DNA

<213> Homo sapiens

<400> 5377

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Tyr Tyr Gln Lys Ala Leu Glu Leu Pro Pro Leu Val Val Glu Gly Ile
      835              840              845
Glu Leu Asp Gln Leu Asp Leu Arg Arg Asp Ile Ala Tyr Asn Leu Ser
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 Pro Glu Asp Met Gly Asp Leu Tyr Leu Asp Val Ala Glu Ala Phe Leu
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 Asp Val Gly Glu Tyr Asn Ser Ala Leu Pro Leu Leu Ser Ala Leu Val
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 Cys Ser Glu Arg Tyr Asn Leu Ala Val Val Trp Leu Arg His Ala Glu
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<212> DNA

<213> Homo sapiens

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 420
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 480
 cgtgaaacca agaaaatgat gaaagagaaa aggcctcgga gtaaacttcc cagagctctg
 540
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 600
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 660
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 720
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 780
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 840
 aatgtccggt atctgtggga gcgatcaagc ctttatgaac agatgggtga tcataaaatg
 900

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 720
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 780
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 900
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 960
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 1020
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 1177

<210> 5372

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5372

Xaa	His	Ser	Ala	Ser	Ala	Leu	Met	Tyr	His	Arg	Asn	Glu	Ser	Leu	Gln
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Pro	Ser	Leu	Gln	Ser	Pro	Gln	Thr	Glu	Leu	Arg	Ser	Asp	Phe	Gln	Cys
		20						25					30		
Val	Val	Gly	Phe	Gly	Gly	Ile	His	Ser	Thr	Pro	Ser	Thr	Val	Leu	Ser
		35				40						45			
Asp	Gln	Ala	Lys	Tyr	Leu	Asn	Pro	Leu	Leu	Gly	Glu	Trp	Lys	His	Phe
	50					55					60				
Thr	Ala	Ser	Leu	Ala	Pro	Arg	Met	Ser	Asn	Gln	Gly	Ile	Ala	Val	Leu
65					70					75				80	
Asn	Asn	Phe	Val	Tyr	Leu	Ile	Gly	Gly	Asp	Asn	Asn	Val	Gln	Gly	Phe
			85					90					95		
Arg	Ala	Glu	Ser	Arg	Cys	Trp	Arg	Tyr	Asp	Pro	Arg	His	Asn	Arg	Trp
		100						105					110		
Xaa	Pro	Asp	Pro	Val	Pro	Ala	Ala	Gly	Ala	Arg	Arg	Pro	Val	Xaa	Val
	115					120						125			
Cys	Val	Val	Gly	Arg	Tyr	Ile	Tyr	Ala	Val	Ala	Gly	Arg	Asp	Tyr	His
	130					135					140				
Asn	Asp	Leu	Asn	Ala	Val	Glu	Arg	Tyr	Asp	Pro	Ala	Thr	Asn	Ser	Trp
145				150					155					160	
Ala	Tyr	Val	Ala	Pro	Leu	Lys	Arg	Glu	Val	Tyr	Ala	His	Ala	Gly	Ala
			165					170					175		
Thr	Leu	Glu	Gly	Lys	Met	Tyr	Ile	Thr	Cys	Gly	Arg	Arg	Gly	Glu	Asp
		180						185					190		
Tyr	Leu	Lys	Glu	Thr	His	Cys	Tyr	Asp	Pro	Gly	Ser	Asn	Thr	Trp	His
	195					200						205			
Thr	Leu	Ala	Asp	Gly	Pro	Val	Arg	Arg	Ala	Trp	His	Gly	Met	Ala	Thr
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Leu	Leu	Asn	Lys	Leu	Tyr	Val	Ile	Gly	Gly	Ser	Asn	Asn	Asp	Ala	Gly

<211> 148
 <212> PRT
 <213> Homo sapiens

<400> 5370
 Met Lys Asp Leu Asp Ala Ile Lys Leu Phe Val Gly Gln Ile Pro Arg
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 His Leu Asp Glu Lys Asp Leu Lys Pro Leu Phe Glu Gln Phe Gly Arg
 20 25 30
 Ile Tyr Glu Leu Thr Val Leu Lys Asp Pro Tyr Thr Gly Met His Lys
 35 40 45
 Gly Gly Arg Pro Ala Pro Ser Pro Leu Ser Pro Ser Leu Arg Leu Pro
 50 55 60
 Pro His Leu Pro Ala Ser Ser Leu Pro His His His Pro Ser Ser Ala
 65 70 75 80
 His Leu Pro Pro Leu Pro Ala Ser Ala Gly Ala Ser Val Leu Thr Pro
 85 90 95
 Ser Leu Pro Pro Thr Pro Pro Pro Leu Ser Gly Gly Ala Ala Asp Arg
 100 105 110
 Ser Glu Arg Ala Pro Ser Pro Pro Pro Pro Leu Pro Pro Ser Pro
 115 120 125
 Pro Ser Gly Ile Ser Ser Leu Ser Pro Ser Leu Ser Pro Ser Leu Ser
 130 135 140
 Pro Phe Leu Phe
 145

<210> 5371
 <211> 1177
 <212> DNA
 <213> Homo sapiens

<400> 5371
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 120
 tccacgccgt ccaactgtcct cagcgaccag gccaaagtatc taaaccctt actgggagag
 180
 tggaagcact tcaactgcctc cctggccccc cgcatgtcca accagggcat cgcggtgctc
 240
 aacaacttcg tatacttgat tggaggggac aacaatgtcc aaggatttcg agcagagtcc
 300
 cgatgctgga ggtatgacct acggcacaac cgctggnttc cagatccagt ccctgcagca
 360
 ggagcacgcc gacctgtcnn cgtgtgtgtt gtaggcaggt acatctacgc tgtggcgggc
 420
 cgtgactacc acaatgacct gaatgctgtg gagcgctacg accctgccac caactcctgg
 480
 gcatactgga cccactcaa gagggaggtg tatgcccacg caggcgcgac gctggagggg
 540
 aagatgtata tcacctgcgg ccgcagaggg gaggattacc tgaaagagac aactgctac
 600
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 660

<211> 137
 <212> PRT
 <213> Homo sapiens

<400> 5368
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 Lys Ala Glu Ala Ser Ser Arg Arg Arg Arg Lys Ser Ser Arg Pro Gln
 20 25 30
 Ala Lys Ala Ala Pro Arg Ala Tyr Ser Asp His Asp Asp Arg Trp Glu
 35 40 45
 Thr Lys Glu Gly Ala Ala Ser Pro Ala Pro Glu Thr Pro Gln Pro Thr
 50 55 60
 Ser Pro Glu Thr Ser Pro Lys Glu Thr Pro Met Gln Pro Pro Glu Ile
 65 70 75 80
 Pro Ala Pro Ala His Arg Pro Pro Glu Asp Glu Gly Glu Glu Asn Glu
 85 90 95
 Gly Glu Glu Asp Glu Glu Trp Glu Asp Ile Ser Glu Asp Glu Glu Glu
 100 105 110
 Glu Glu Ile Glu Val Glu Glu Gly Asp Glu Glu Glu Pro Ala Gln Asp
 115 120 125
 His Gln Ala Pro Glu Ala Ala Pro Thr
 130 135

<210> 5369
 <211> 646
 <212> DNA
 <213> Homo sapiens

<400> 5369
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 120
 cagcagcagc agctcctgca gccgcggccc tcgcccgtgg gcagcagcgg gcccgagccc
 180
 cccggggggc agcccgcg ccatgaaggac ctggacgcca tcaaactctt cgtggggccag
 240
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 300
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 360
 ccctccccc tctccccc cctccgcctc cccccacc ttccggcacc ttctctcccc
 420
 catcaccatc cctcctctgc tcacctcct cctctgctg cctctgccgg agcatcggtt
 480
 cttacccct cctccacc caccctcct cccctctctg ggggtgcagc tgacagatcc
 540
 gagcggggcc cctccccc tccgcccc ctccctcct cccaccttc cggcatctcc
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 646

<210> 5370

275 280 285
 Val Leu Arg Gly Phe Leu Glu Asp Val Val Pro Asp Ala Thr Ser Ala
 290 295 300
 Tyr Pro Tyr Leu Leu Leu Tyr Glu Ser Arg Gln Arg Arg Tyr Leu Gly
 305 310 315 320
 Ser Ser Pro Glu Gly Ser Gly Phe Cys Ser Lys Asp Arg Phe Val Ala
 325 330 335
 Tyr Pro Cys Ala Val Gly Gln Thr Ala Phe Ser Ser Gly Arg His Tyr
 340 345 350
 Trp Glu Val Gly Met Asn Ile Thr Gly Asp Ala Leu Trp Ala Leu Gly
 355 360 365
 Val Cys Arg Asp Asn Val Ser Arg Lys Asp Arg Val Leu Lys Cys Pro
 370 375 380
 Glu Asn Gly Phe Trp Val Val Gln Leu Ser Lys Gly Thr Lys Tyr Leu
 385 390 395 400
 Ser Thr Phe Ser Ala Leu Thr Pro Val Met Leu Met Glu Pro Pro Ser
 405 410 415
 His Met Gly Ile Phe Leu Asp Phe Glu Ala Gly Glu Val Ser Phe Tyr
 420 425 430
 Ser Val Ser Asp Gly Ser His Leu His Thr Tyr Ser Gln Ala Thr Phe
 435 440 445
 Pro Gly Pro Leu Gln Pro Phe Phe Cys Leu Gly Ala Pro Lys Ser Gly
 450 455 460
 Gln Met Val Ile Ser Thr Val Thr Met Trp Val Lys Gly
 465 470 475

<210> 5367

<211> 549

<212> DNA

<213> Homo sapiens

<400> 5367

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 120
 gagtctcagg ggctggggat gctgcccccg aagcccccta cttttgggga gtctctgtcc
 180
 cagcacaaag ctgaggccag cagccgcaga aggagaaaga gcagtcggcc ccaggccaag
 240
 gcagcgccca gggcctacag tgaccatgat gaccgctggg agacaaaaga aggggcagca
 300
 tccccagccc ctgagactcc acagcctact tccccgaga cttcccccaa ggagacaccc
 360
 atgcagccac ccgagatccc agctcctgcc caccggcctc ctgaagacga gggggaagag
 420
 aatgaggggg aagaggatga agaatgggag gacataagtg aggatgagga agaggaggag
 480
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 540
 gccccacc
 549

<210> 5368

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 1620
 agggttctct ggcacacgc tggcagccat tagacacaca ggggggtttc tcaaattcta
 1680
 aatataattg tgattagaac tgtcaaacat taagagggtg tactgacaga tgcttcctag
 1740
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 1824

<210> 5366

<211> 477

<212> PRT

<213> Homo sapiens

<400> 5366

Met	Glu	Ala	Val	Glu	Leu	Ala	Arg	Lys	Leu	Gln	Glu	Glu	Ala	Thr	Cys
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Ser	Ile	Cys	Leu	Asp	Tyr	Phe	Thr	Asp	Pro	Val	Met	Thr	Thr	Cys	Gly
			20					25					30		
His	Asn	Phe	Cys	Arg	Ala	Cys	Ile	Gln	Leu	Ser	Trp	Glu	Lys	Ala	Arg
			35				40					45			
Gly	Lys	Lys	Gly	Arg	Arg	Lys	Arg	Lys	Gly	Ser	Phe	Pro	Cys	Pro	Glu
			50				55				60				
Cys	Arg	Glu	Met	Ser	Pro	Gln	Arg	Asn	Leu	Leu	Pro	Asn	Arg	Leu	Leu
65					70				75					80	
Thr	Lys	Val	Ala	Glu	Met	Ala	Gln	Gln	His	Pro	Gly	Leu	Gln	Lys	Gln
				85				90					95		
Asp	Leu	Cys	Gln	Glu	His	His	Glu	Pro	Leu	Lys	Leu	Phe	Cys	Gln	Lys
			100					105					110		
Asp	Gln	Ser	Pro	Ile	Cys	Val	Val	Cys	Arg	Glu	Ser	Arg	Glu	His	Arg
			115					120					125		
Leu	His	Arg	Val	Leu	Pro	Ala	Glu	Glu	Ala	Val	Gln	Gly	Tyr	Lys	Leu
							135				140				
Lys	Leu	Glu	Glu	Asp	Met	Glu	Tyr	Leu	Arg	Glu	Gln	Ile	Thr	Arg	Thr
145					150				155					160	
Gly	Asn	Leu	Gln	Ala	Arg	Glu	Glu	Gln	Ser	Leu	Ala	Glu	Trp	Gln	Gly
				165				170						175	
Lys	Val	Lys	Glu	Arg	Arg	Glu	Arg	Ile	Val	Leu	Glu	Phe	Glu	Lys	Met
			180					185					190		
Asn	Leu	Tyr	Leu	Val	Glu	Glu	Glu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu
			195					200					205		
Thr	Glu	Glu	Glu	Glu	Thr	Ala	Ser	Arg	Leu	Arg	Glu	Ser	Val	Ala	Cys
			210					215					220		
Leu	Asp	Arg	Gln	Gly	His	Ser	Leu	Glu	Leu	Leu	Leu	Gln	Leu	Glu	
225					230				235					240	
Glu	Arg	Ser	Thr	Gln	Gly	Pro	Leu	Gln	Met	Leu	Gln	Asp	Met	Lys	Glu
				245					250					255	
Pro	Leu	Ser	Arg	Lys	Asn	Asn	Val	Ser	Val	Gln	Cys	Pro	Glu	Val	Ala
				260					265					270	
Pro	Pro	Thr	Arg	Pro	Arg	Thr	Val	Cys	Arg	Val	Pro	Gly	Gln	Ile	Glu

<212> DNA

<213> Homo sapiens

<400> 5365

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120
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180
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240
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300
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360
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660
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720
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780
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840
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900
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960
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1020
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1080
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1260
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1320
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1380
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1440
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 420
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 480
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 660
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 780
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 894

<210> 5364

<211> 187

<212> PRT

<213> Homo sapiens

<400> 5364

Ala	Ala	Leu	Pro	Ser	Arg	Cys	Pro	Leu	Gln	Pro	Arg	Gln	Pro	Trp	Arg
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Arg	Trp	Arg	Lys	Arg	Ala	Leu	Gly	Arg	Leu	Gln	Gly	Xaa	Gly	Pro	Gln
			20					25					30		
Pro	Gly	Leu	Tyr	Ser	Tyr	Ile	Arg	Asp	Asp	Leu	Phe	Thr	Ser	Glu	Ile
		35					40					45			
Phe	Lys	Leu	Glu	Leu	Gln	Asn	Ala	Pro	Arg	His	Ala	Ser	Phe	Ser	Asp
	50					55					60				
Val	Arg	Arg	Phe	Leu	Gly	Arg	Phe	Gly	Leu	Gln	Pro	His	Lys	Thr	Lys
65					70					75					80
Leu	Phe	Gly	Gln	Pro	Pro	Cys	Ala	Phe	Val	Thr	Phe	Arg	Ser	Ala	Ala
				85					90					95	
Glu	Arg	Asp	Lys	Ala	Leu	Arg	Val	Leu	His	Gly	Ala	Leu	Trp	Lys	Gly
			100					105					110		
Arg	Pro	Leu	Ser	Val	Ala	Trp	Pro	Gly	Pro	Arg	Pro	Thr	Pro	Trp	Pro
		115					120					125			
Gly	Gly	Gly	Xaa	Gln	Glu	Gly	Glu	Ser	Glu	Pro	Pro	Val	Thr	Arg	Xaa
	130					135						140			
Gly	Arg	Arg	Gly	Asp	Pro	Ser	Met	Asp	Ser	Ala	Leu	Xaa	Leu	Ser	Ser
145					150					155					160
Leu	Ser	Gly	Ser	Ser	Trp	Ser	Ala	Ser	Arg	Cys	Cys	Arg	Asn	Xaa	Ala
				165					170					175	
Gln	Glu	Ile	Gly	Ser	Thr	Asn	Arg	Ala	Leu	Arg					
			180						185						

<210> 5365

<211> 1824

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 960
 tctagaaata agtcatatct ctgagttgat aaaatgcttt tctgaacata cattttaggt
 1020
 atctgggcgt gctggcgggt gcctgtaatc ccagctactc ggggaggctt gagacagggg
 1080

<210> 5362
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 5362
 Cys Pro Thr Val Asp Pro Leu Leu Gln Lys Asn Cys Asn Asp Gly Ser
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 Ala Thr Ala Leu Ala Arg Val Pro Leu His Ala Cys Arg Glu Gly Arg
 20 25 30
 Trp Ala Ser Pro Ser Gly Phe Phe Cys Cys Cys Cys Phe Leu Arg
 35 40 45
 Trp Ser Leu Ala Leu Xaa Ala Gln Thr Glu Val Gln Arg Pro Asp Leu
 50 55 60
 Asn Ser Leu Gln Pro Pro Pro Gly Phe Lys Gly Phe Ser Cys Leu
 65 70 75 80
 Ser Leu Leu Ser Ser Trp Asp Tyr Arg His Pro Pro Ala Arg Pro Ala
 85 90 95
 Phe Phe Cys Ile Phe Ser Arg Asp Gly Val Leu Ser Cys Trp Pro Gly
 100 105 110
 Trp Ser Arg Thr Pro Asp Leu Met Xaa Ser Thr Arg Leu Gly Leu Pro
 115 120 125
 Asn Cys Trp Asp His Arg Arg Glu Pro Pro Arg Pro Ala Val Cys Leu
 130 135 140
 Val Phe Lys Pro Ile Asn Glu Pro Val Ser Leu Phe Gly Ile Tyr Asn
 145 150 155 160
 Asn Glu Lys Ile His
 165

<210> 5363
 <211> 894
 <212> DNA
 <213> Homo sapiens

<400> 5363
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 agcatcgacg gttcagatcc cgccccgcct ggggcgaagc cgggggtggc ggcgacctcg
 120
 cggcgttgca cgggctctgt gagcacctcc cctctgagca cttcccttgt gacaggccac
 180
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 240
 ggccggagaac cgccctgggcg atgagtgaga acctcgacaa cgaggggccc aagcccatgg
 300

1250 1255 1260
 Arg Gln Ala Gln Ala Gln His Leu Gln Glu Val Arg Leu Val Pro Gln
 1265 1270 1275 1280
 Asp Arg Val Ala Glu Leu His Arg Leu Leu Ser Leu Gln Gly Glu Gln
 1285 1290 1295
 Ala Arg Arg Arg Leu Asp Ala Gln Arg Glu Glu His Glu Lys Gln Leu
 1300 1305 1310
 Lys Ala Thr Glu Glu Arg Val Glu Glu Ala Glu Met Ile Leu Lys Asn
 1315 1320 1325
 Met Glu Met Leu Leu Gln Glu Lys Val Asp Lys Leu Lys Glu Gln Phe
 1330 1335 1340
 Glu Lys Asn Thr Lys Ser Asp Leu Leu Leu Lys Glu Leu Tyr Val Glu
 1345 1350 1355 1360
 Asn Ala His Leu Val Arg Ala Leu Gln Ala Thr Glu Glu Lys Gln Arg
 1365 1370 1375
 Gly Ala Glu Lys Gln Ser Arg Leu Leu Glu Glu Lys Val Arg Ala Leu
 1380 1385 1390
 Asn Lys Leu Val Ser Arg Ile Ala Pro Ala Ala Leu Ser Val
 1395 1400 1405

<210> 5361
 <211> 1080
 <212> DNA
 <213> Homo sapiens

<400> 5361
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 120
 gggcttctctg ggcctccggc agatggagga tggcattaaa tgccaacaca gtcagcttac
 180
 catccacaag gccagcagct gccaacagct gccctagacc tatcaacaag acaacttcat
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 300
 cctcaaagag ccggggcagg atgccagaat ctaactacat cctctcccgg tttgcagttc
 360
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 420
 ctcaagttcc taaacagagt aagtgccagt tgatgtccca ccgtggatcc tttactccag
 480
 aaaaattgta atgatggctc ggccaccgcc ttggctagag tcccactgca cgcgtgtcgt
 540
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<213> Homo sapiens

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 Val Ser Lys Pro Ser Leu Phe Ser Ser Val Gln Leu Tyr Arg Gln Ser
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Leu	Gly	Lys	His	His	Thr	Ser	Arg	Glu	Pro	Gln	Ala	Gln	Pro	Lys	Pro
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Met Lys Tyr Asn Thr Lys Lys Ala Pro Leu Gly Lys Leu Thr Val Ala
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Gln Ile Lys Ala Gly Tyr Gln Ser Leu Lys Lys Ile Glu Asp Cys Ile
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Arg Ala Gly Gln His Gly Arg Ala Leu Met Glu Ala Cys Asn Glu Phe
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Tyr Thr Arg Ile Pro His Asp Phe Gly Leu Arg Thr Pro Pro Leu Ile
260      265      270
Arg Thr Gln Lys Glu Leu Ser Glu Lys Ile Gln Leu Leu Glu Ala Leu
275      280      285
Gly Asp Ile Glu Ile Ala Ile Lys Leu Val Lys Thr Glu Leu Gln Ser
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Pro Glu His Pro Leu Asp Gln His Tyr Arg Asn Leu His Cys Ala Leu
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Arg Pro Leu Asp His Glu Ser Tyr Glu Phe Lys Val Ile Ser Gln Tyr
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Leu Gln Ser Thr His Ala Pro Thr His Ser Asp Tyr Thr Met Thr Leu
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Leu Asp Leu Phe Glu Val Glu Lys Asp Gly Glu Lys Glu Ala Phe Arg
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Glu Asp Leu His Asn Arg Met Leu Leu Trp His Gly Ser Arg Met Ser
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Asn Trp Val Gly Ile Leu Ser His Gly Leu Arg Ile Ala Pro Pro Glu
385      390      395      400
Ala Pro Ile Thr Gly Tyr Met Phe Gly Lys Gly Ile Tyr Phe Ala Asp
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Met Ser Ser Lys Ser Ala Asn Tyr Cys Phe Ala Ser Arg Leu Lys Asn
420      425      430
Thr Gly Leu Leu Leu Leu Ser Glu Val Ala Leu Gly Gln Cys Asn Glu
435      440      445
Leu Leu Glu Ala Asn Pro Lys Ala Glu Gly Leu Leu Gln Gly Lys His
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Ser Thr Lys Gly Leu Gly Lys Met Ala Pro Ser Ser Ala His Phe Val
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Thr Leu Asn Gly Ser Thr Val Pro Leu Gly Pro Ala Ser Asp Thr Gly

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<210> 5346

<211> 534

<212> PRT

<213> Homo sapiens

<400> 5346

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Gln	Asp	Gly	Met	Pro	Gly	Arg	Ser	Trp	Ala	Ser	Lys	Arg	Val	Ser	Glu
			20					25					30		
Ser	Val	Lys	Ala	Leu	Leu	Leu	Lys	Gly	Lys	Ala	Pro	Val	Asp	Pro	Glu
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<210> 5344
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 5344
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 Ser Leu Ser Gly Arg Val Ile Val Ala Gly Gly Leu Gly Asn Gln Pro
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 Thr Val Leu Glu Thr Ala Glu Ala Phe His Pro Gly Lys Asn Lys Trp
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 Glu Ile Leu Pro Ala Met Pro Thr Pro Arg Cys Ala Cys Ser Ser Ile
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<210> 5345
 <211> 1912
 <212> DNA
 <213> Homo sapiens

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 565 570 575
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 580 585 590
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 595 600 605
 Gly Glu Lys Leu Tyr Gln His Val Arg Ala Trp Leu Pro Ala Tyr Ala
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 Thr Pro His Phe Ile Arg Ile Gln Asp Ala Met Glu Val Thr Ser Thr
 625 630 635 640
 Phe Lys Leu Met Lys Thr Arg Leu Val Arg Glu Gly Phe Asn Val Gly
 645 650 655
 Ile Val Val Asp Pro Leu Phe Val Leu Asp Asn Arg Ala Gln Ser Phe
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 Lys Leu
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<210> 5343

<211> 752

<212> DNA

<213> Homo sapiens

<400> 5343

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Gly Arg Ala Leu Leu Val Trp Thr Gly Pro Gly Ala Gly Ser Val Thr
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Phe Gly Glu Leu Asp Ala Arg Ala Cys Gln Ala Ala Trp Ala Leu Lys
145      150      155      160
Ala Glu Leu Gly Asp Pro Ala Ser Leu Cys Ala Gly Glu Pro Thr Ala
      165      170      175
Leu Leu Val Leu Ala Ser Gln Ala Val Pro Ala Leu Cys Met Trp Leu
      180      185      190
Gly Leu Ala Lys Leu Gly Cys Pro Thr Ala Trp Ile Asn Pro His Gly
      195      200      205
Arg Gly Met Pro Leu Ala His Ser Val Leu Ser Ser Gly Ala Arg Val
      210      215      220
Leu Val Val Asp Pro Asp Leu Arg Glu Ser Leu Glu Glu Ile Leu Pro
225      230      235      240
Lys Leu Gln Ala Glu Asn Ile Arg Cys Phe Tyr Leu Ser His Thr Ser
      245      250      255
Pro Thr Pro Gly Val Gly Ala Leu Gly Ala Ala Leu Asp Ala Ala Pro
      260      265      270
Ser His Pro Val Pro Ala Asp Leu Arg Ala Gly Ile Thr Trp Arg Ser
      275      280      285
Pro Ala Leu Phe Ile Tyr Thr Ser Gly Thr Thr Gly Leu Pro Lys Pro
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Ala Ile Leu Thr His Glu Arg Val Leu Gln Met Ser Lys Met Leu Ser
305      310      315      320
Leu Ser Gly Ala Thr Ala Asp Asp Val Val Tyr Thr Val Leu Pro Leu
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Tyr His Val Met Gly Leu Val Val Gly Ile Leu Gly Cys Leu Asp Leu
      340      345      350
Gly Ala Thr Cys Val Leu Ala Pro Lys Phe Ser Thr Ser Cys Phe Trp
      355      360      365
Asp Asp Cys Arg Gln His Gly Val Thr Val Ile Leu Tyr Val Gly Glu
      370      375      380
Leu Leu Arg Tyr Leu Cys Asn Ile Pro Gln Gln Pro Glu Asp Arg Thr
385      390      395      400
His Thr Val Arg Leu Ala Met Gly Asn Gly Leu Arg Ala Asp Val Trp
      405      410      415
Glu Thr Phe Gln Gln Arg Phe Gly Pro Ile Arg Ile Trp Glu Val Tyr
      420      425      430
Gly Ser Thr Glu Gly Asn Met Gly Leu Val Asn Tyr Val Gly Arg Cys
      435      440      445
Gly Ala Leu Gly Lys Met Ser Cys Leu Leu Arg Met Leu Ser Pro Phe
      450      455      460
Glu Leu Val Gln Phe Asp Met Glu Ala Ala Glu Pro Val Arg Asp Asn
465      470      475      480
Gln Gly Phe Cys Ile Pro Val Gly Leu Gly Glu Pro Gly Leu Leu Leu
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Thr Lys Val Val Ser Gln Gln Pro Phe Val Gly Tyr Arg Gly Pro Arg
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<211> 690

<212> PRT

<213> Homo sapiens

<400> 5342

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		20						25					30		
Leu	Arg	Trp	Leu	Leu	Gly	Asp	Pro	Thr	Cys	Cys	Val	Leu	Leu	Gly	Leu
		35					40					45			
Ala	Met	Leu	Ala	Arg	Pro	Trp	Leu	Gly	Pro	Trp	Val	Pro	His	Gly	Leu
		50				55					60				
Ser	Leu	Ala	Ala	Ala	Ala	Ala	Leu	Thr	Leu	Leu	Pro	Ala	Arg	Leu	
65				70					75					80	
Pro	Pro	Gly	Leu	Arg	Trp	Leu	Pro	Ala	Asp	Val	Ile	Phe	Leu	Ala	Lys
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<210> 5341
<211> 2455
<212> DNA
<213> Homo sapiens

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<210> 5340
 <211> 217
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<400> 5340
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 Glu Glu Ser Gln Asp Glu Asp Asp Ala Leu Asn Glu Ile Val Arg Cys
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 100 105 110
 Arg Trp Ser Ala Lys Tyr Arg Tyr Asp Lys Glu Trp Leu Asn Asn Gly
 115 120 125
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 Ala Lys Lys Ile Val Ser Thr His His Leu Leu Ala Asp Val Tyr Gly
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 Asn Lys His His Pro Asp Leu His Leu Trp Ala Cys Ser Gly Lys Arg
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 Lys Asp Gln Asp Gln Ile Ile Ala Gly Val Glu Lys Lys Ile Ala Gln
 195 200 205
 Asp Thr Val Asn Arg Glu Glu Lys Lys
 210 215

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<212> PRT

<213> Homo sapiens

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			20					25					30		
Asn	Ser	Gln	Met	Lys	Ile	Val	His	Lys	Lys	Lys	Glu	Arg	Gly	His	Gly
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Tyr	Asn	Ser	Ser	Ala	Ala	Ala	Trp	Gln	Ala	Met	Gln	Asn	Gly	Gly	Lys
	50				55					60					
Asn	Lys	Asn	Phe	Pro	Asn	Asn	Gln	Ser	Trp	Asn	Ser	Ser	Leu	Ser	Gly
65					70					75				80	
Pro	Arg	Leu	Leu	Phe	Lys	Ser	Gln	Ala	Asn	Gln	Asn	Tyr	Ala	Gly	Ala
			85					90					95		
Lys	Phe	Ser	Glu	Pro	Pro	Ser	Pro	Ser	Val	Leu	Pro	Lys	Pro	Pro	Ser
			100				105						110		
His	Trp	Val	Pro	Val	Ser	Phe	Asn	Pro	Ser	Asp	Lys	Glu	Ile	Met	Thr
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<210> 5339

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<212> DNA

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<211> 2742

<212> DNA

<213> Homo sapiens

<400> 5337

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<212> PRT

<213> Homo sapiens

<400> 5336

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<400> 5334

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<211> 4282

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<211> 61

<212> PRT

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 aa
 2582

<210> 5330
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 <213> Homo sapiens

<400> 5330
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 Ala Leu Arg Lys Lys Glu Leu Asp Glu Glu Glu Ser Ile Arg Lys Lys
 35 40 45
 Ala Val Gln Phe Gly Thr Gly Glu Leu Cys Asp Ala Ile Ser Ala Val
 50 55 60
 Glu Glu Lys Val Ser Tyr Leu Arg Pro Leu Asp Phe Glu Glu Ala Arg
 65 70 75 80
 Glu Leu Phe Leu Leu Gly Gln His Tyr Val Phe Glu Ala Lys Glu Phe
 85 90 95
 Phe Gln Ile Asp Gly Tyr Val Thr Asp His Ile Glu Val Val Gln Asp
 100 105 110
 His Ser Ala Leu Phe Lys Val Leu Ala Phe Phe Glu Thr Asp Met Glu
 115 120 125
 Arg Arg Cys Lys Met His Lys Arg Arg Ile Ala Met Leu Glu Pro Leu
 130 135 140
 Thr Val Asp Leu Asn Pro Gln Tyr Tyr Leu Leu Val Asn Arg Gln Ile
 145 150 155 160
 Gln Phe Glu Ile Ala His Ala Tyr Tyr Asp Met Met Asp Leu Lys Val
 165 170 175
 Ala Ile Ala Asp Arg Leu Arg Asp Pro Asp Ser His Ile Val Lys Lys
 180 185 190
 Ile Asn Asn Leu Asn Lys Ser Ala Leu Lys Tyr Tyr Gln Leu Phe Leu
 195 200 205
 Asp Ser Leu Arg Asp Pro Asn Lys Val Phe Pro Glu His Ile Gly Glu
 210 215 220
 Asp Val Leu Arg Pro Ala Met Leu Ala Lys Phe Arg Val Ala Arg Leu
 225 230 235 240
 Tyr Gly Lys Ile Ile Thr Ala Asp Pro Lys Lys Glu Leu Glu Asn Leu
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 Ala Thr Ser Leu Glu His Tyr Lys Phe Ile Val Asp Tyr Cys Glu Lys

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2220

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 515 520 525
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 Tyr Arg Phe Thr Gly Arg His Cys Glu Ile Gly Lys Pro Asp Ser Cys
 545 550 555 560
 Ala Ser Gly Pro Cys His Asn Gly Gly Thr Cys Phe His Tyr Ile Gly
 565 570 575
 Lys Tyr Lys Cys Asp Cys Pro Pro Gly Phe Ser Gly Arg His Cys Glu
 580 585 590
 Ile Ala Pro Ser Pro Cys Phe Arg Ser Pro Cys Val Asn Gly Gly Thr
 595 600 605
 Cys Glu Asp Arg Asp Thr Asp Phe Phe Cys His Cys Gln Ala Gly Tyr
 610 615 620
 Met Gly Arg Arg Cys Gln Ala Glu Val Asp Cys Gly Pro Pro Glu Glu
 625 630 635 640
 Val Lys His Ala Thr Leu Arg Phe Asn Gly Thr Arg Leu Gly Ala Val
 645 650 655
 Ala Leu Tyr Ala Cys Asp Arg Gly Tyr Ser Leu Ser Ala Pro Ser Arg
 660 665 670
 Ile Arg Val Cys Gln Pro His Gly Val Trp Ser Glu Pro Pro Gln Cys
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<210> 5329

<211> 2582

<212> DNA

<213> Homo sapiens

<400> 5329

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 600

50	55	60
Ala Thr Glu Asp Val Arg His Tyr Phe Pro Glu Leu Leu Asp Phe Asn		
65	70	75
Ala Thr Trp Val Phe Val Ala Thr Trp Tyr Arg Val Thr Phe Phe Gly		80
	85	90
Gly Ser Ser Ser Ser Pro Val Asn Thr Phe Gln Thr Val Leu Ile Thr		95
	100	105
Asp Gly Lys Leu Ser Phe Thr Ile Phe Asn Tyr Glu Ser Ile Val Trp		110
	115	120
Thr Thr Gly Thr His Ala Ser Ser Gly Gly Asn Ala Thr Gly Leu Gly		125
	130	135
Gly Ile Ala Ala Gln Ala Gly Phe Asn Ala Gly Asp Gly Gln Arg Tyr		140
145	150	155
Phe Ser Ile Pro Gly Ser Arg Thr Ala Asp Met Ala Glu Val Glu Thr		160
	165	170
Thr Thr Asn Val Gly Val Pro Gly Arg Trp Ala Phe Arg Ile Asp Asp		175
	180	185
Ala Gln Val Arg Val Gly Gly Cys Gly His Thr Thr Ser Val Cys Leu		190
	195	200
Ala Leu Arg Pro Cys Leu Asn Gly Gly Lys Cys Ile Asp Asp Cys Val		205
	210	215
Thr Gly Asn Pro Ser Tyr Thr Cys Ser Cys Leu Ser Gly Phe Thr Gly		220
225	230	235
Arg Arg Cys His Leu Asp Val Asn Glu Cys Ala Ser Gln Pro Cys Gln		240
	245	250
Asn Gly Gly Thr Cys Thr His Gly Ile Asn Ser Phe Arg Cys Gln Cys		255
	260	265
Pro Ala Gly Phe Gly Gly Pro Thr Cys Glu Thr Ala Gln Ser Pro Cys		270
	275	280
Asp Thr Lys Glu Cys Gln His Gly Gly Gln Cys Gln Val Glu Asn Gly		285
	290	295
Ser Ala Val Cys Val Cys Gln Ala Gly Tyr Thr Gly Ala Ala Cys Glu		300
305	310	315
Met Asp Val Asp Asp Cys Ser Pro Asp Pro Cys Leu Asn Gly Gly Ser		320
	325	330
Cys Val Asp Leu Val Gly Asn Tyr Thr Cys Leu Cys Ala Glu Pro Phe		335
	340	345
Lys Gly Leu Arg Cys Glu Thr Gly Asp His Pro Val Pro His Ala Cys		350
	355	360
Leu Ser Ala Pro Cys His Asn Gly Gly Thr Cys Val Asp Ala Asp Gln		365
	370	375
Gly Tyr Val Cys Glu Cys Pro Glu Gly Phe Met Gly Leu Asp Cys Arg		380
385	390	395
Glu Arg Val Xaa Pro Met Thr Val Ser Ala Ala Thr Glu Ala Asp Ala		400
	405	410
Trp Ala Pro Thr Pro Pro Ser Ala His Ala Pro Cys Gly Xaa Ser Leu		415
	420	425
Gly Phe Ser Val Asn Leu Lys Ser Gln Pro Xaa Pro Cys Asn Met Asn		430
	435	440
Thr Gln Cys Pro Asp Gly Gly Tyr Cys Met Glu His Gly Gly Ser Tyr		445
	450	455
Leu Cys Val Cys His Thr Asp His Asn Ala Ser His Ser Leu Pro Ser		460
465	470	475
Pro Cys Asp Ser Asp Pro Cys Phe Asn Gly Gly Ser Cys Asp Ala His		480

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 1980
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<210> 5328

<211> 694

<212> PRT

<213> Homo sapiens

<400> 5328

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			20					25					30		
Arg	Cys	Val	Val	Ala	Ala	Phe	Trp	Ala	Asp	Val	Asp	Asn	Arg	Arg	Ala
		35					40				45				
Gly	Asp	Val	Tyr	Tyr	Arg	Glu	Ala	Thr	Asp	Pro	Ala	Met	Leu	Arg	Arg

	100		105		110
Arg Gly Leu Asp Gly Arg Val Leu Tyr Trp Pro Arg Gly Arg Val Trp					
	115		120		125
Gly Gly Ser Ser Ser Leu Asn Ala Met Val Tyr Val Arg Gly His Ala					
	130		135		140
Glu Asp Tyr Glu Arg Trp Gln Arg Gln Gly Ala Arg Gly Trp Asp Tyr					
145		150		155	160
Ala His Cys Leu Pro Tyr Phe Arg Lys Ala Gln Gly His Xaa Ala Gly					
	165		170		175
Arg Gln Pro Val Pro Gly Arg Asp Gly Pro Leu Arg Val Ser Arg Gly					
	180		185		190
Lys Thr Asn His Pro Leu His Cys Ala Phe Leu Glu Ala Thr Gln Gln					
	195		200		205
Ala Gly Tyr Pro Leu Thr Glu Asp Met Asn Gly Phe Gln Gln Glu Gly					
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Phe Gly Trp Met Asp Met Thr Ile His Glu					
225		230			

<210> 5327

<211> 2084

<212> DNA

<213> Homo sapiens

<400> 5327

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<400> 5325
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<210> 5326

<211> 234

<212> PRT

<213> Homo sapiens

<400> 5326

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Gly	Ala	Leu	Gly	Gln	Gln	Gln	Ser	Leu	Gly	Ala	Arg	Ala	Leu	Ala	Ser
		20					25						30		
Ala	Gly	Ser	Glu	Ser	Arg	Asp	Glu	Tyr	Ser	Tyr	Val	Val	Val	Gly	Ala
		35				40					45				
Gly	Ser	Ala	Gly	Cys	Val	Leu	Ala	Gly	Arg	Leu	Thr	Glu	Asp	Pro	Ala
		50			55						60				
Glu	Arg	Val	Leu	Leu	Leu	Glu	Ala	Gly	Pro	Lys	Asp	Val	Arg	Ala	Gly
65					70				75					80	
Ser	Lys	Arg	Leu	Ser	Trp	Lys	Ile	His	Met	Pro	Ala	Ala	Leu	Val	Ala
			85					90					95		
Asn	Leu	Cys	Asp	Asp	Arg	Tyr	Asn	Trp	Cys	Tyr	His	Thr	Glu	Val	Gln

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 Gln Tyr Lys Ala Pro Thr Glu Asn His His Asn Arg Pro Tyr Tyr Ala
 195 200 205
 Lys

<210> 5323
 <211> 475
 <212> DNA
 <213> Homo sapiens

<400> 5323
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 180
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 475

<210> 5324
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 5324
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 35 40 45
 Gly Arg Arg Pro Tyr Lys Trp Arg Gly Val Gly Arg Lys Ala Trp Gln
 50 55 60
 Leu Trp Thr Ala Pro Arg Ser Leu Leu Leu Ser Val Gly Leu Ala Ser
 65 70 75 80
 Leu Arg Arg Ala Ser Gln His Ala Val Met Leu Pro Gln Leu Leu Ala
 85 90 95
 Val Ser Cys Leu Pro Asp Pro Gly Arg
 100 105

<210> 5325
 <211> 938
 <212> DNA
 <213> Homo sapiens

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 6300
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 6324

<210> 5322
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 5322
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 35 40 45
 Glu Arg Leu Thr Glu Leu Glu Arg Lys Leu Thr Phe Glu Gln Gln Arg
 50 55 60
 Ser Asp Leu Trp Glu Arg Leu Tyr Val Glu Ala Lys Asp Gln Asn Gly
 65 70 75 80
 Lys Gln Gly Thr Asp Gly Lys Lys Lys Gly Gly Arg Gly Ser His Arg
 85 90 95
 Ala Lys Asn Lys Ser Lys Glu Thr Phe Leu Gly Ser Val Lys Glu Thr
 100 105 110
 Phe Asp Ala Met Lys Asn Ser Thr Lys Glu Phe Val Arg His His Lys
 115 120 125
 Glu Lys Ile Lys Gln Ala Lys Glu Ala Val Lys Glu Asn Leu Lys Lys
 130 135 140
 Phe Ser Asp Ser Val Lys Ser Thr Phe Arg His Phe Lys Asp Thr Thr
 145 150 155 160
 Lys Asn Ile Phe Asp Glu Lys Gly Asn Lys Arg Phe Gly Ala Thr Lys
 165 170 175
 Glu Ala Ala Glu Lys Pro Arg Thr Val Phe Ser Asp Tyr Leu His Pro

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4680
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4740
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4800
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Gly Leu Leu Phe Met Tyr Val Gln Cys Lys Val Tyr Val Gln Leu Trp
      130          135          140
Lys Arg Leu Lys Ala Tyr Asn Arg Val Ile Tyr Val Gln Asn Cys Pro
      145          150          155          160
Glu Thr Ser Lys Lys Asn Ile Phe Glu Lys Ser Pro Leu Thr Glu Pro
      165          170          175
Asn Phe Glu Asn Lys His Gly Tyr Gly Ile Cys His Ser Asp
      180          185          190

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<210> 5313
 <211> 322
 <212> DNA
 <213> Homo sapiens

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<400> 5313
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60
aaaggcgctca tgcgagtagg catcctggcg aaaggcctcc tcctgcgtgg ggacaggaac
120
gtgcgcctcg ctctgctctg ctccgagaag cccacgcaca gcctgctgcg gaggatcgcc
180
cagcagctgc cccggcaaca caggcaattc cacgttgtgt gcgactggcc tgtgcatatg
240
gaggtgttca gtgacctggc cctggacact cctgctaaca ggacacacac atactctctt
300
acacacatac atgtccacac ac
322

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<210> 5314
 <211> 107
 <212> PRT
 <213> Homo sapiens

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<400> 5314
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Thr Arg Val Leu Lys Gly Val Met Arg Val Gly Ile Leu Ala Lys Gly
      20           25           30
Leu Leu Leu Arg Gly Asp Arg Asn Val Arg Leu Ala Leu Leu Cys Ser

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210	215	220
Val Asp Gly Gln Leu Thr Ser Pro Ala Thr Pro Ser Pro Asp Ala Ser		
225	230	235
Thr Ser Leu Glu Asp Ser Phe Ala His Leu Gln Leu Ser Gly Asp Asn		240
	245	250
Thr Ala Glu Arg Ser His Arg Gly Glu Gly Glu Glu Asp His Glu Ser		255
	260	265
Pro Ser Ser Gly Arg Val Pro Ala Pro Asp Thr Ser Ile Glu Glu Thr		270
	275	280
Glu Ser Asp Ala Ser Ser Asp Ser Glu Asp Val Ser Ala Val Val Ala		285
	290	295
Gln His Ser Leu Thr Gln Gln Arg Leu Leu Val Ser Asn Ala Asn Gln		300
305	310	315
Thr Val Pro Asp Arg Ser Asp Arg Ser Gly Thr Asp Arg Ser Val Ala		320
	325	330
Gly Gly Gly Thr Val Ser Val Ser Val Arg Ser Arg Arg Pro Asp Gly		335
	340	345
Gln Cys Thr Val Thr Glu Val		350
355		

<210> 5311
 <211> 572
 <212> DNA
 <213> Homo sapiens

<400> 5311
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 ctccacttcg tgcaccaggc ctacctgcag cagtggatca agagctccga cacgcgctgc
 120
 tgcgagctct gcaagtatga gttcatcatg gagaccaagc tgaagccact gagaaaatgg
 180
 gagaagttgc agatgacgtc cagcgagcgc aggaagatca tgtgctcagt gacattccac
 240
 gtcattgccca tcacatgtgt ggtctggtcc ttgtatgtgc tcattgaccg tcttgctgag
 300
 gagatcaagc aggggcaggc aacaggaatc ctagaatggc ccttttggac taaattggtg
 360
 gttgtggcca tcggcttcac cagaggactt ctttttatgt atgttcagt taaagtgtat
 420
 gtgcaattgt ggaagagact caaggcctat aatagagtga tctatgttca aaactgtcca
 480
 gaaacaagca aaaagaatat ttttgaaaaa tctccactaa cagagcccaa ctttgaaaat
 540
 aaacatggat atggaatctg tcattccgac ac
 572

<210> 5312
 <211> 190
 <212> PRT
 <213> Homo sapiens

<400> 5312
 Cys His Cys Glu Gly Asp Asp Glu Ser Pro Leu Ile Thr Pro Cys His

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 1560
 aaggaacttg ggtgttaata gttgagagct gtttagtaat aaccagttt tcttgaggct
 1620
 tgtttacttt atacttttta aaaacttctg tagttctttt ggccagtgtg tttgtattat
 1680
 ctgtgcatta atggctctca tctgactcct gcattgtgtc ttatttttct gcatggattg
 1740
 gcataagacc attactaaaa tttggcacct gtgagatggt tgatattatg aacaggaaac
 1800
 ataatttaat gtatgaatag atgtgaattt gggatttcaa aatagatgaa taacaactat
 1860
 tttatagtaa agttattgaa atggaaatga aaacagccag taacttatgt ttcagaatgt
 1920
 ttgtaacaca cttcatgggtg ttcccatagg ctttctgtc tagtcttata gtttgaggtt
 1980
 tttttggtct gcatttttct ttttgattac aaaatttata atttaataaa tactagagtt
 2040
 tatcaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa
 2078

<210> 5310

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5310

Met Met Ala Gly Cys Gly Glu Ile Asp His Ser Ile Asn Met Leu Pro
 1 5 10 15
 Thr Asn Arg Lys Ala Asn Glu Ser Cys Ser Asn Thr Ala Pro Ser Leu
 20 25 30
 Thr Val Pro Glu Cys Ala Ile Cys Leu Gln Thr Cys Val His Pro Val
 35 40 45
 Ser Leu Pro Cys Lys His Val Phe Cys Tyr Leu Cys Val Lys Gly Ala
 50 55 60
 Ser Trp Leu Gly Lys Arg Cys Ala Leu Cys Arg Gln Glu Ile Pro Glu
 65 70 75 80
 Asp Phe Leu Asp Lys Pro Thr Leu Leu Ser Pro Glu Glu Leu Lys Ala
 85 90 95
 Ala Ser Arg Gly Asn Gly Glu Tyr Ala Trp Tyr Tyr Glu Gly Arg Asn
 100 105 110
 Gly Trp Trp Gln Tyr Asp Glu Arg Thr Ser Arg Glu Leu Glu Asp Ala
 115 120 125
 Phe Ser Lys Gly Lys Lys Asn Thr Glu Met Leu Ile Ala Gly Phe Leu
 130 135 140
 Tyr Val Ala Asp Leu Glu Asn Met Val Gln Tyr Arg Arg Asn Glu His
 145 150 155 160
 Gly Arg Arg Arg Lys Ile Lys Arg Asp Ile Ile Asp Ile Pro Lys Lys
 165 170 175
 Gly Val Ala Gly Leu Arg Leu Asp Cys Asp Ala Asn Thr Val Asn Leu
 180 185 190
 Ala Arg Glu Ser Ser Ala Asp Gly Ala Asp Ser Val Ser Ala Gln Ser
 195 200 205
 Gly Ala Ser Val Gln Pro Leu Val Ser Ser Val Arg Pro Leu Thr Ser

<212> DNA

<213> Homo sapiens

<400> 5309

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120
tccacccgca acgtactccg ggtcggcctt gcgctcgggg cctgagaggg gcggcggcgg
180
ggtcaggggc cgcacaaaga atgaaccagc agtgggaagag aaaatactgt aagctggctg
240
actgctggtg aagaaaatgc tttatTTTTTg tggcaggcat ctgtgggatc tgtaatagaa
300
atgatggctg gctgtgggtga aattgatcat tcaataaaca tgcttcctac aaacaggaaa
360
gcgaacgagt cctgttctaa tactgcacct tctttaaccg tccctgaatg tgccatttgt
420
ctgcaaacat gtgttcatcc agtcagtctg ccctgtaagc acgttttctg ctatctatgt
480
gtaaaaggag cttcatggct tggaaagcgg tgtgctcttt gtcgacaaga aattcccag
540
gatttccttg acaagccaac cttgttgtca ccagaagaac tcaaggcagc aagtagagga
600
aatggtgaat atgcatggta ttatgaagga agaatgggt ggtggcagta cgatgagcgc
660
actagtagag agctggaaga tgctttttcc aaaggtaaaa agaactga aatgttaatt
720
gctggctttc tgtatgtcgc tgatcttgaa aacatggttc aatataggag aaatgaacat
780
ggacgtcgca ggaagattaa gcgagatata atagatatac caaagaaggg agtagctgga
840
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900
gcggacagtg tatcagcaca gagtggagct tctgttcagc ccctagtgtc ttctgtaagg
960
cccctaacat cagtagatgg tcagttaaca agccctgcaa caccatcccc tgatgcaagc
1020
acttctctgg aagactcttt tgctcattta caactcagtg gagacaacac agctgaaagg
1080
agtcataagg gagaaggaga agaagatcat gaatcaccat cttcaggcag ggtaccagca
1140
ccagacacct ccattgaaga aactgaatca gatgccagta gtgatatga ggatgtatct
1200
gcagttgttg cacagcactc cttgacccaa cagagacttt tggtttctaa tgcaaaccag
1260
acagtacccg atcgatcaga tcgatcggga actgatcgat cagtagcagg gggtggaaca
1320
gtgagtgtca gtgtcagatc tagaaggcct gatggacagt gcacagtaac tgaagtttaa
1380
ataaaaatgt cttcagctcc atgctcaagg ttgaaagggt tacctgtaaa tttctgcccc
1440
cataacatta tactcatccc tagtagtgca ttttgggagt tggggtgggg aggggtatgg
1500

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taagcgaatt ggaaatgctg agcttccata agtcagctga gttttaaagg taaacggtat
 720
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 780
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 840
 agcctaagaa gttatatatt taatcaggta gacaaaacag ttcaaagcat aagggtccatg
 900
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 960
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 1020
 tgggtgactt tgggaagtca ccacctcttc ccaagcctgt ttcccatatc acagatgtgg
 1080
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 1140
 caatcagcaa ggacctatct ctgccctggg tcagctcctc agaaccaacc cccagcatct
 1200
 ctaaagcaaa agcctcacct caagggctgc tcagaagaga gcaccttcag catgagttgt
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 1320
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 1380
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 1440
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<210> 5308

<211> 112

<212> PRT

<213> Homo sapiens

<400> 5308

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Leu	Leu	Ile	Asp	Leu	Thr	Trp	Thr	His	Arg	Gly	Gly	Lys	Thr	Cys	Gly
			20					25					30		
Asp	His	His	Arg	Gly	His	Gly	Pro	Thr	Ser	Val	Ile	Trp	Glu	Thr	Gly
		35					40				45				
Leu	Gly	Arg	Gly	Gly	Asp	Phe	Pro	Lys	Ser	Pro	Ser	Ile	His	Asp	Arg
	50					55				60					
Gly	Arg	Ala	Trp	Glu	Leu	Gly	Thr	Gln	Gly	Ser	Ser	Lys	Arg	Ser	Arg
65					70				75					80	
Ser	Leu	Cys	Tyr	Pro	Gln	Ile	His	Lys	Leu	Arg	Ile	Thr	Cys	Ile	His
				85				90						95	
Phe	Pro	Pro	Pro	Trp	Thr	Leu	Cys	Phe	Glu	Leu	Phe	Cys	Leu	Pro	Asp
			100					105					110		

<210> 5309

<211> 2078

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 420
 caggggtgtc tgaagccgcc ctgtcagctg gccgggtccaa gcctgtgggt ggagctgggtg
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa
 582

<210> 5306

<211> 62

<212> PRT

<213> Homo sapiens

<400> 5306

Met	Ala	Arg	Gly	His	Gly	Thr	Arg	Gln	Gly	Cys	Leu	Lys	Pro	Pro	Cys
1				5					10					15	
Gln	Leu	Ala	Gly	Pro	Ser	Leu	Trp	Leu	Glu	Leu	Val	Cys	Val	Tyr	Leu
			20					25					30		
Ile	Lys	Ser	His	Arg	Cys	Leu	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
			35				40					45			
Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
			50				55					60			

<210> 5307

<211> 1551

<212> DNA

<213> Homo sapiens

<400> 5307

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 120
 cattctgtct cccagccttt cttctctctt tgtgtgtctc cagcacttcc ttcttttcta
 180
 acatggcctg gagagagtct ctctctcctt gtctctgtct ctttaataata gtttttaacg
 240
 tggacatctc ttccttggtg cagtgggttt taaatactga gaagaaccaa gtcagggttt
 300
 ttaaagcaga ctaaaagcat gaaattgctt tcagaagaat gtatatcatc gggaaaagtt
 360
 cgggggcaga gtgggggaat caggctttat tcaaaagaaa cagttgaaaa catgggactt
 420
 tttctaccca atgcccattt cagcactcct ctgagactaa ttgggaaacg gggaaattct
 480
 tggaattttt tttttaagaa acttttttgt gtttttttta atttttaggtc acttattagt
 540
 gaaacctcat tttagatctg acattggtag atagatggat ttaggcaaat atgatgcggt
 600
 tgtggggaat ccacgtgggt gacgttagaa cctcccttct gcagactgtt gcctgtcatc
 660

<210> 5303
 <211> 334
 <212> DNA
 <213> Homo sapiens

<400> 5303
 cgtacgcacg ccactgacag ccgcccagca gaagtacaag aagggcgatg tggctctgcac
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 acccagcgga atacgaaaga agttcaacgg caagccgggg cgcccggctg ggctcacgag
 120
 atggctgcat gaaggagtca cagcggcgag gctactgctc acgccacctg tccatgcgaa
 180
 ccaaagagat ggaaggcctg gcagacagtg ggcctggcgg ggcggggccgg cccgcggccg
 240
 tggcagcccc tgagggcagc acggagtttg actgggggtga tgagacgtcg agggacagtg
 300
 gaggccagca gtgtggcgac tcgtggagac tcac
 334

<210> 5304
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 5304
 Met Trp Ser Ala His Pro Ala Glu Tyr Glu Arg Ser Ser Thr Ala Ser
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 Arg Gly Ala Arg Leu Gly Ser Arg Asp Gly Cys Met Lys Glu Ser Gln
 20 25 30
 Arg Arg Gly Tyr Cys Ser Arg His Leu Ser Met Arg Thr Lys Glu Met
 35 40 45
 Glu Gly Leu Ala Asp Ser Gly Pro Gly Gly Ala Gly Arg Pro Ala Ala
 50 55 60
 Val Ala Ala Arg Glu Gly Ser Thr Glu Phe Asp Trp Gly Asp Glu Thr
 65 70 75 80
 Ser Arg Asp Ser Gly Gly Gln Gln Cys Gly Asp Ser Trp Arg Leu
 85 90 95

<210> 5305
 <211> 582
 <212> DNA
 <213> Homo sapiens

<400> 5305
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 120
 ctgtttagg cactggctag ggaggggag gcctccttcc tgcccctcga gacactcttg
 180
 ggagatgcat tttccgtctg gctcacaggg ggagggtag gctttgtacc ccagcccctg
 240
 cccaggccac tgtgaggggtg ggtgctggct gagcccctgg ggcagaagga gtggggcagg
 300

915 920 925
 Gln Leu Phe Val Gly Gly Ala Gly Gly Gln Gln Gly Phe Leu Gly Cys
 930 935 940
 Ile Arg Ser Leu Arg Met Asn Gly Val Thr Leu Asp Leu Glu Glu Arg
 945 950 955 960
 Ala Lys Val Thr Ser Gly Phe Ile Ser Gly Cys Ser Gly His Cys Thr
 965 970 975
 Ser Tyr Gly Thr Asn Cys Glu Asn Gly Gly Lys Cys Leu Glu Arg Tyr
 980 985 990
 His Gly Tyr Ser Cys Asp Cys Ser Asn Thr Ala Tyr Asp Gly Thr Phe
 995 1000 1005
 Cys Asn Lys Asp Val Gly Ala Phe Phe Glu Glu Gly Met Trp Leu Arg
 1010 1015 1020
 Tyr Asn Phe Gln Ala Pro Ala Thr Asn Ala Arg Asp Ser Ser Ser Arg
 1025 1030 1035 1040
 Val Asp Asn Ala Pro Asp Gln Gln Asn Ser His Pro Asp Leu Ala Gln
 1045 1050 1055
 Glu Glu Ile Arg Phe Ser Phe Ser Thr Thr Lys Ala Pro Cys Ile Leu
 1060 1065 1070
 Leu Tyr Ile Ser Ser Phe Thr Thr Asp Phe Leu Ala Val Leu Val Lys
 1075 1080 1085
 Pro Thr Gly Ser Leu Gln Ile Arg Tyr Asn Leu Gly Gly Thr Arg Glu
 1090 1095 1100
 Pro Tyr Asn Ile Asp Val Asp His Arg Asn Met Ala Asn Gly Gln Pro
 1105 1110 1115 1120
 His Ser Val Asn Ile Thr Arg His Glu Lys Thr Ile Phe Leu Lys Leu
 1125 1130 1135
 Asp His Tyr Pro Ser Val Ser Tyr His Leu Pro Ser Ser Ser Asp Thr
 1140 1145 1150
 Leu Phe Asn Ser Pro Lys Ser Leu Phe Leu Gly Lys Val Ile Glu Thr
 1155 1160 1165
 Gly Lys Ile Asp Gln Glu Ile His Lys Tyr Asn Thr Pro Gly Phe Thr
 1170 1175 1180
 Gly Cys Leu Ser Arg Val Gln Phe Asn Gln Ile Ala Pro Leu Lys Ala
 1185 1190 1195 1200
 Ala Leu Arg Gln Thr Asn Ala Ser Ala His Val His Ile Gln Gly Glu
 1205 1210 1215
 Leu Val Glu Ser Asn Cys Gly Ala Ser Pro Leu Thr Leu Ser Pro Met
 1220 1225 1230
 Ser Ser Ala Thr Asp Pro Trp His Leu Asp His Leu Asp Ser Ala Ser
 1235 1240 1245
 Ala Asp Phe Pro Tyr Asn Pro Gly Gln Gly Gln Ala Ile Arg Asn Gly
 1250 1255 1260
 Val Asn Arg Asn Ser Ala Ile Ile Gly Gly Val Ile Ala Val Val Ile
 1265 1270 1275 1280
 Phe Thr Ile Leu Cys Thr Leu Val Phe Leu Ile Arg Tyr Met Phe Arg
 1285 1290 1295
 His Lys Gly Thr Tyr His Thr Asn Glu Ala Lys Gly Ala Glu Ser Ala
 1300 1305 1310
 Glu Ser Ala Asp Ala Ala Ile Met Asn Asn Asp Pro Asn Phe Thr Glu
 1315 1320 1325
 Thr Ile Asp Glu Ser Lys Lys Glu Trp Leu Ile
 1330 1335

485 490 495
 Gln Val Lys Thr Gly Glu Lys Tyr Phe Phe Gly Gly Phe Leu Asn Gln
 500 505 510
 Met Asn Asn Ser Ser His Ser Val Leu Gln Pro Ser Phe Gln Gly Cys
 515 520 525
 Met Gln Leu Ile Gln Val Asp Asp Gln Leu Val Asn Leu Tyr Glu Val
 530 535 540
 Ala Gln Arg Lys Pro Gly Ser Phe Ala Asn Val Ser Ile Asp Met Cys
 545 550 555 560
 Ala Ile Ile Asp Arg Cys Val Pro Asn His Cys Glu His Gly Gly Lys
 565 570 575
 Cys Ser Gln Thr Trp Asp Ser Phe Lys Cys Thr Cys Asp Glu Thr Gly
 580 585 590
 Tyr Ser Gly Ala Thr Cys His Asn Ser Ile Tyr Glu Pro Ser Cys Glu
 595 600 605
 Ala Tyr Lys His Leu Gly Gln Thr Ser Asn Tyr Tyr Trp Ile Asp Pro
 610 615 620
 Asp Gly Ser Gly Pro Leu Gly Pro Leu Lys Val Tyr Cys Asn Met Thr
 625 630 635 640
 Glu Asp Lys Val Trp Thr Ile Val Ser His Asp Leu Gln Met Gln Thr
 645 650 655
 Pro Val Val Gly Tyr Asn Pro Glu Lys Tyr Ser Val Thr Gln Leu Val
 660 665 670
 Tyr Ser Ala Ser Met Asp Gln Ile Ser Ala Ile Thr Asp Ser Ala Glu
 675 680 685
 Tyr Cys Glu Gln Tyr Val Ser Tyr Phe Cys Lys Met Ser Arg Leu Leu
 690 695 700
 Asn Thr Pro Asp Gly Ser Pro Tyr Thr Trp Trp Val Gly Lys Ala Asn
 705 710 715 720
 Glu Lys His Tyr Tyr Trp Gly Gly Ser Gly Pro Gly Ile Gln Lys Cys
 725 730 735
 Ala Cys Gly Ile Glu Arg Asn Cys Thr Asp Pro Lys Tyr Tyr Cys Asn
 740 745 750
 Cys Asp Ala Asp Tyr Lys Gln Trp Arg Lys Asp Ala Gly Phe Leu Ser
 755 760 765
 Tyr Lys Asp His Leu Pro Val Ser Gln Val Val Val Gly Asp Thr Asp
 770 775 780
 Arg Gln Gly Ser Glu Ala Lys Leu Ser Val Gly Pro Leu Arg Cys Gln
 785 790 795 800
 Gly Asp Arg Asn Tyr Trp Asn Ala Ala Ser Phe Pro Asn Pro Ser Ser
 805 810 815
 Tyr Leu His Phe Ser Thr Phe Gln Gly Glu Thr Ser Ala Asp Ile Ser
 820 825 830
 Phe Tyr Phe Lys Thr Leu Thr Pro Trp Gly Val Phe Leu Glu Asn Met
 835 840 845
 Gly Lys Glu Asp Phe Ile Lys Leu Glu Leu Lys Ser Ala Thr Glu Val
 850 855 860
 Ser Phe Ser Phe Asp Val Gly Asn Gly Pro Val Glu Ile Val Val Arg
 865 870 875 880
 Ser Pro Thr Pro Leu Asn Asp Asp Gln Trp His Arg Val Thr Ala Glu
 885 890 895
 Arg Asn Val Lys Gln Ala Ser Leu Gln Val Asp Arg Leu Pro Gln Gln
 900 905 910
 Ile Arg Lys Ala Pro Thr Glu Gly His Thr Arg Leu Glu Leu Tyr Ser

50					55					60					
Ser 65	Tyr	Ser	Pro	Gly	Tyr 70	Ala	Lys	Ile	Asn	Lys 75	Arg	Gly	Gly	Ala	Gly 80
Gly	Trp	Ser	Pro	Ser 85	Asp	Ser	Asp	His	Tyr 90	Gln	Trp	Leu	Gln	Val	Asp 95
Phe	Gly	Asn	Arg	Lys 100	Gln	Ile	Ser	Ala	Ile 105	Ala	Thr	Gln	Gly	Arg	Tyr 110
Ser	Ser	Ser	Asp	Trp 115	Val	Thr	Gln	Tyr	Arg 120	Met	Leu	Tyr	Ser	Asp	Thr 125
Gly	Arg	Asn	Trp	Lys 130	Pro	Tyr	His	Gln	Asp 135	Gly	Asn	Ile	Trp	Ala	Phe 140
Pro 145	Gly	Asn	Ile	Asn 150	Ser	Asp	Gly	Val	Val 155	Arg	His	Glu	Leu	Gln	His 160
Pro	Ile	Ile	Ala	Arg 165	Tyr	Val	Arg	Ile	Val 170	Pro	Leu	Asp	Trp	Asn	Gly 175
Glu	Gly	Arg	Ile	Gly 180	Leu	Arg	Ile	Glu	Val 185	Tyr	Gly	Cys	Ser	Tyr	Trp 190
Ala	Asp	Val	Ile	Asn 195	Phe	Asp	Gly	His	Val 200	Val	Leu	Pro	Tyr	Arg	Phe 205
Arg	Asn	Lys	Lys	Met 210	Lys	Thr	Leu	Lys	Asp 215	Val	Ile	Ala	Leu	Asn	Phe 220
Lys 225	Thr	Ser	Glu	Ser 230	Glu	Gly	Val	Ile	Leu 235	His	Gly	Glu	Gly	Gln	Gln 240
Gly	Asp	Tyr	Ile	Thr 245	Leu	Glu	Leu	Lys	Lys 250	Ala	Lys	Leu	Val	Leu	Ser 255
Leu	Asn	Leu	Gly	Ser 260	Asn	Gln	Leu	Gly	Pro 265	Ile	Tyr	Gly	His	Thr	Ser 270
Val	Met	Thr	Gly	Ser 275	Leu	Leu	Asp	His	His 280	Trp	His	Ser	Val	Val	
Ile	Glu	Arg	Gln	Gly 290	Arg	Ser	Ile	Asn	Leu 295	Thr	Leu	Asp	Arg	Ser	Met 300
Gln 305	His	Phe	Arg	Thr 310	Asn	Gly	Glu	Phe	Asp 315	Tyr	Leu	Asp	Leu	Asp	Tyr 320
Glu	Ile	Thr	Phe	Gly 325	Gly	Ile	Pro	Phe	Ser 330	Gly	Lys	Pro	Ser	Ser	Ser 335
Ser	Arg	Lys	Asn	Phe 340	Lys	Gly	Cys	Met	Glu 345	Ser	Ile	Asn	Tyr	Asn	Gly 350
Val	Asn	Ile	Thr	Asp 355	Leu	Ala	Arg	Lys	Lys 360	Leu	Glu	Pro	Ser	Asn	
Val	Gly	Asn	Leu	Ser 370	Phe	Ser	Cys	Val	Glu 375	Pro	Tyr	Thr	Val	Pro	Val 380
Phe 385	Phe	Asn	Ala	Thr 390	Ser	Tyr	Leu	Glu	Val 395	Pro	Gly	Arg	Leu	Asn	Gln 400
Asp	Leu	Phe	Ser	Val 405	Ser	Phe	Gln	Phe	Arg 410	Thr	Trp	Asn	Pro	Asn	Gly 415
Leu	Leu	Val	Phe	Ser 420	His	Phe	Ala	Asp	Asn 425	Leu	Gly	Asn	Val	Glu	Ile 430
Asp	Leu	Thr	Glu	Ser 435	Lys	Val	Gly	Val	His 440	Ile	Asn	Ile	Thr	Gln	Thr 445
Lys	Met	Ser	Gln	Ile 450	Asp	Ile	Ser	Ser	Gly 455	Ser	Gly	Leu	Asn	Asp	Gly 460
Gln 465	Trp	His	Glu	Val 470	Arg	Phe	Leu	Ala	Lys 475	Glu	Asn	Phe	Ala	Ile	Leu 480
Thr	Ile	Asp	Gly	Asp	Glu	Ala	Ser	Ala	Val	Arg	Thr	Asn	Ser	Pro	Leu

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 5760
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 6712

<210> 5302

<211> 1339

<212> PRT

<213> Homo sapiens

<400> 5302

Ala	Pro	Pro	Ala	Gly	Arg	Arg	Arg	Met	Gln	Ala	Ala	Pro	Arg	Ala	Gly
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Cys	Gly	Ala	Ala	Leu	Leu	Leu	Trp	Ile	Val	Ser	Ser	Cys	Leu	Cys	Arg
			20					25					30		
Ala	Trp	Thr	Ala	Pro	Ser	Thr	Ser	Gln	Lys	Cys	Asp	Glu	Pro	Leu	Val
		35					40				45				
Ser	Gly	Leu	Pro	His	Val	Ala	Phe	Ser	Ser	Ser	Ser	Ser	Ile	Ser	Gly

915	920	925
Gln Leu Phe Val Gly Gly Ala Gly Gly Gln Gln Gly Phe Leu Gly Cys		
930	935	940
Ile Arg Ser Leu Arg Met Asn Gly Val Thr Leu Asp Leu Glu Glu Arg		
945	950	955
Ala Lys Val Thr Ser Gly Phe Ile Ser Gly Cys Ser Gly His Cys Thr		
965	970	975
Ser Tyr Gly Thr Asn Cys Glu Asn Gly Gly Lys Cys Leu Glu Arg Tyr		
980	985	990
His Gly Tyr Ser Cys Asp Cys Ser Asn Thr Ala Tyr Asp Gly Thr Phe		
995	1000	1005
Cys Asn Lys Asp Val Gly Ala Phe Phe Glu Glu Gly Met Trp Leu Arg		
1010	1015	1020
Tyr Asn Phe Gln Ala Pro Ala Thr Asn Ala Arg Asp Ser Ser Ser Arg		
1025	1030	1035
Val Asp Asn Ala Pro Asp Gln Gln Asn Ser His Pro Asp Leu Ala Gln		
1045	1050	1055
Glu Glu Ile Arg Phe Ser Phe Ser Thr Thr Lys Ala Pro Cys Ile Leu		
1060	1065	1070
Leu Tyr Ile Ser Ser Phe Thr Thr Asp Phe Leu Ala Val Leu Val Lys		
1075	1080	1085
Pro Thr Gly Ser Leu Gln Ile Arg Tyr Asn Leu Gly Gly Thr Arg Glu		
1090	1095	1100
Pro Tyr Asn Ile Asp Val Asp His Arg Asn Met Ala Asn Gly Gln Pro		
1105	1110	1115
His Ser Val Asn Ile Thr Arg His Glu Lys Thr Ile Phe Leu Lys Leu		
1125	1130	1135
Asp His Tyr Pro Ser Val Ser Tyr His Leu Pro Ser Ser Ser Asp Thr		
1140	1145	1150
Leu Phe Asn Ser Pro Lys Ser Leu Phe Leu Gly Lys Val Ile Glu Thr		
1155	1160	1165
Gly Lys Ile Asp Gln Glu Ile His Lys Tyr Asn Thr Pro Gly Phe Thr		
1170	1175	1180
Gly Cys Leu Ser Arg Val Gln Phe Asn Gln Ile Ala Pro Leu Lys Ala		
1185	1190	1195
Ala Leu Arg Gln Thr Asn Ala Ser Ala His Val His Ile Gln Gly Glu		
1205	1210	1215
Leu Val Glu Ser Asn Cys Gly Ala Ser Pro Leu Thr Leu Ser Pro Met		
1220	1225	1230
Ser Ser Ala Thr Asp Pro Trp His Leu Asp His Leu Asp Ser Ala Ser		
1235	1240	1245
Ala Asp Phe Pro Tyr Asn Pro Gly Gln Gly Gln Ala Ile Arg Asn Gly		
1250	1255	1260
Val Asn Arg Asn Ser Ala Ile Ile Gly Gly Val Ile Ala Val Val Ile		
1265	1270	1275
Phe Thr Ile Leu Cys Thr Leu Val Phe Leu Ile Arg Tyr Met Phe Arg		
1285	1290	1295
His Lys Gly Thr Tyr His Thr Asn Glu Ala Lys Gly Ala Glu Ser Ala		
1300	1305	1310
Glu Ser Ala Asp Ala Ala Ile Met Asn Asn Asp Pro Asn Phe Thr Glu		
1315	1320	1325
Thr Ile Asp Glu Ser Lys Lys Glu Trp Leu Ile		
1330	1335	

485 490 495
 Gln Val Lys Thr Gly Glu Lys Tyr Phe Phe Gly Gly Phe Leu Asn Gln
 500 505 510
 Met Asn Asn Ser Ser His Ser Val Leu Gln Pro Ser Phe Gln Gly Cys
 515 520 525
 Met Gln Leu Ile Gln Val Asp Asp Gln Leu Val Asn Leu Tyr Glu Val
 530 535 540
 Ala Gln Arg Lys Pro Gly Ser Phe Ala Asn Val Ser Ile Asp Met Cys
 545 550 555 560
 Ala Ile Ile Asp Arg Cys Val Pro Asn His Cys Glu His Gly Gly Lys
 565 570 575
 Cys Ser Gln Thr Trp Asp Ser Phe Lys Cys Thr Cys Asp Glu Thr Gly
 580 585 590
 Tyr Ser Gly Ala Thr Cys His Asn Ser Ile Tyr Glu Pro Ser Cys Glu
 595 600 605
 Ala Tyr Lys His Leu Gly Gln Thr Ser Asn Tyr Tyr Trp Ile Asp Pro
 610 615 620
 Asp Gly Ser Gly Pro Leu Gly Pro Leu Lys Val Tyr Cys Asn Met Thr
 625 630 635 640
 Glu Asp Lys Val Trp Thr Ile Val Ser His Asp Leu Gln Met Gln Thr
 645 650 655
 Pro Val Val Gly Tyr Asn Pro Glu Lys Tyr Ser Val Thr Gln Leu Val
 660 665 670
 Tyr Ser Ala Ser Met Asp Gln Ile Ser Ala Ile Thr Asp Ser Ala Glu
 675 680 685
 Tyr Cys Glu Gln Tyr Val Ser Tyr Phe Cys Lys Met Ser Arg Leu Leu
 690 695 700
 Asn Thr Pro Asp Gly Ser Pro Tyr Thr Trp Trp Val Gly Lys Ala Asn
 705 710 715 720
 Glu Lys His Tyr Tyr Trp Gly Gly Ser Gly Pro Gly Ile Gln Lys Cys
 725 730 735
 Ala Cys Gly Ile Glu Arg Asn Cys Thr Asp Pro Lys Tyr Tyr Cys Asn
 740 745 750
 Cys Asp Ala Asp Tyr Lys Gln Trp Arg Lys Asp Ala Gly Phe Leu Ser
 755 760 765
 Tyr Lys Asp His Leu Pro Val Ser Gln Val Val Val Gly Asp Thr Asp
 770 775 780
 Arg Gln Gly Ser Glu Ala Lys Leu Ser Val Gly Pro Leu Arg Cys Gln
 785 790 795 800
 Gly Asp Arg Asn Tyr Trp Asn Ala Ala Ser Phe Pro Asn Pro Ser Ser
 805 810 815
 Tyr Leu His Phe Ser Thr Phe Gln Gly Glu Thr Ser Ala Asp Ile Ser
 820 825 830
 Phe Tyr Phe Lys Thr Leu Thr Pro Trp Gly Val Phe Leu Glu Asn Met
 835 840 845
 Gly Lys Glu Asp Phe Ile Lys Leu Glu Leu Lys Ser Ala Thr Glu Val
 850 855 860
 Ser Phe Ser Phe Asp Val Gly Asn Gly Pro Val Glu Ile Val Val Arg
 865 870 875 880
 Ser Pro Thr Pro Leu Asn Asp Asp Gln Trp His Arg Val Thr Ala Glu
 885 890 895
 Arg Asn Val Lys Gln Ala Ser Leu Gln Val Asp Arg Leu Pro Gln Gln
 900 905 910
 Ile Arg Lys Ala Pro Thr Glu Gly His Thr Arg Leu Glu Leu Tyr Ser

<210> 5303
 <211> 334
 <212> DNA
 <213> Homo sapiens

<400> 5303
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 120
 atggctgcat gaaggagtca cagcggcgag gctactgctc acgccacctg tccatgcgaa
 180
 ccaaagagat ggaaggcctg gcagacagtg ggcctggcgg ggcggggccgg cccgcggccg
 240
 tggcagcccc tgagggcagc acggagtttg actggggtga tgagacgtcg agggacagtg
 300
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 334

<210> 5304
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 5304
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 Arg Gly Ala Arg Leu Gly Ser Arg Asp Gly Cys Met Lys Glu Ser Gln
 20 25 30
 Arg Arg Gly Tyr Cys Ser Arg His Leu Ser Met Arg Thr Lys Glu Met
 35 40 45
 Glu Gly Leu Ala Asp Ser Gly Pro Gly Gly Ala Gly Arg Pro Ala Ala
 50 55 60
 Val Ala Ala Arg Glu Gly Ser Thr Glu Phe Asp Trp Gly Asp Glu Thr
 65 70 75 80
 Ser Arg Asp Ser Gly Gly Gln Gln Cys Gly Asp Ser Trp Arg Leu
 85 90 95

<210> 5305
 <211> 582
 <212> DNA
 <213> Homo sapiens

<400> 5305
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 120
 ctgttgtagg cactggctag ggaggggcag gcctccttcc tgcccctcga gacactcttg
 180
 ggagatgcat tttccgtctg gctcacaggg ggaggggtgag gctttgtacc ccagcccctg
 240
 cccagggcac tgtgaggggtg ggtgctggct gagcccctgg ggcagaagga gtggggcagg
 300

cgggggtcttt gttctcggtt cccacagcag agccagggtga gggggggcct gccaggacta
 360
 gacagaagtg gggcggtctg aacctgctt ccagccatgg ccagggggcca cggaaccctg
 420
 caggggtgtc tgaagccgcc ctgtcagctg gccggtccaa gcctgtggct ggagctgggt
 480
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa
 582

<210> 5306

<211> 62

<212> PRT

<213> Homo sapiens

<400> 5306

Met	Ala	Arg	Gly	His	Gly	Thr	Arg	Gln	Gly	Cys	Leu	Lys	Pro	Pro	Cys
1				5					10					15	
Gln	Leu	Ala	Gly	Pro	Ser	Leu	Trp	Leu	Glu	Leu	Val	Cys	Val	Tyr	Leu
			20					25					30		
Ile	Lys	Ser	His	Arg	Cys	Leu	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
		35				40					45				
Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
	50					55					60				

<210> 5307

<211> 1551

<212> DNA

<213> Homo sapiens

<400> 5307

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 120
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 240
 tggacatctc ttccttggtg cagtgggttt taaatactga gaagaaccaa gtcagggttt
 300
 ttaaagcaga ctaaaagcat gaaattgctt tcagaagaat gtatatcatc gggaaaagtt
 360
 cgggggcaga gtgggggaat caggctttat tcaaaagaaa cagttgaaaa catgggactt
 420
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 720
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 780
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 840
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 1551

<210> 5308

<211> 112

<212> PRT

<213> Homo sapiens

<400> 5308

Met	Leu	Gly	Val	Gly	Ser	Glu	Glu	Leu	Thr	Gln	Gly	Arg	Asp	Gly	Ser
1				5					10					15	
Leu	Leu	Ile	Asp	Leu	Thr	Trp	Thr	His	Arg	Gly	Gly	Lys	Thr	Cys	Gly
			20					25						30	
Asp	His	His	Arg	Gly	His	Gly	Pro	Thr	Ser	Val	Ile	Trp	Glu	Thr	Gly
		35					40					45			
Leu	Gly	Arg	Gly	Gly	Asp	Phe	Pro	Lys	Ser	Pro	Ser	Ile	His	Asp	Arg
	50					55					60				
Gly	Arg	Ala	Trp	Glu	Leu	Gly	Thr	Gln	Gly	Ser	Ser	Lys	Arg	Ser	Arg
65				70				75						80	
Ser	Leu	Cys	Tyr	Pro	Gln	Ile	His	Lys	Leu	Arg	Ile	Thr	Cys	Ile	His
				85				90						95	
Phe	Pro	Pro	Pro	Trp	Thr	Leu	Cys	Phe	Glu	Leu	Phe	Cys	Leu	Pro	Asp
			100					105						110	

<210> 5309

<211> 2078

<212> DNA

<213> Homo sapiens

<400> 5309

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120
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180
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240
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300
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360
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420
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480
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540
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600
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660
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720
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780
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900
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1020
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1080
agtcataggg gagaaggaga agaagatcat gaatcaccat cttcaggcag ggtaccagca
1140
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1380
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1440
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1500

gaaggataga ctcataatta aaatgtctaa catgtctctg ttgagaaatt tatttaatgt
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 1620
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 1740
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 1920
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 2078

<210> 5310

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5310

Met	Met	Ala	Gly	Cys	Gly	Glu	Ile	Asp	His	Ser	Ile	Asn	Met	Leu	Pro
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Thr	Asn	Arg	Lys	Ala	Asn	Glu	Ser	Cys	Ser	Asn	Thr	Ala	Pro	Ser	Leu
			20					25					30		
Thr	Val	Pro	Glu	Cys	Ala	Ile	Cys	Leu	Gln	Thr	Cys	Val	His	Pro	Val
			35				40					45			
Ser	Leu	Pro	Cys	Lys	His	Val	Phe	Cys	Tyr	Leu	Cys	Val	Lys	Gly	Ala
			50			55					60				
Ser	Trp	Leu	Gly	Lys	Arg	Cys	Ala	Leu	Cys	Arg	Gln	Glu	Ile	Pro	Glu
					70					75				80	
Asp	Phe	Leu	Asp	Lys	Pro	Thr	Leu	Leu	Ser	Pro	Glu	Glu	Leu	Lys	Ala
				85					90					95	
Ala	Ser	Arg	Gly	Asn	Gly	Glu	Tyr	Ala	Trp	Tyr	Tyr	Glu	Gly	Arg	Asn
			100					105					110		
Gly	Trp	Trp	Gln	Tyr	Asp	Glu	Arg	Thr	Ser	Arg	Glu	Leu	Glu	Asp	Ala
			115				120					125			
Phe	Ser	Lys	Gly	Lys	Lys	Asn	Thr	Glu	Met	Leu	Ile	Ala	Gly	Phe	Leu
			130			135					140				
Tyr	Val	Ala	Asp	Leu	Glu	Asn	Met	Val	Gln	Tyr	Arg	Arg	Asn	Glu	His
					150					155				160	
Gly	Arg	Arg	Arg	Lys	Ile	Lys	Arg	Asp	Ile	Ile	Asp	Ile	Pro	Lys	Lys
				165				170						175	
Gly	Val	Ala	Gly	Leu	Arg	Leu	Asp	Cys	Asp	Ala	Asn	Thr	Val	Asn	Leu
			180				185					190			
Ala	Arg	Glu	Ser	Ser	Ala	Asp	Gly	Ala	Asp	Ser	Val	Ser	Ala	Gln	Ser
			195				200					205			
Gly	Ala	Ser	Val	Gln	Pro	Leu	Val	Ser	Ser	Val	Arg	Pro	Leu	Thr	Ser

210 215 220
 Val Asp Gly Gln Leu Thr Ser Pro Ala Thr Pro Ser Pro Asp Ala Ser
 225 230 235 240
 Thr Ser Leu Glu Asp Ser Phe Ala His Leu Gln Leu Ser Gly Asp Asn
 245 250 255
 Thr Ala Glu Arg Ser His Arg Gly Glu Gly Glu Glu Asp His Glu Ser
 260 265 270
 Pro Ser Ser Gly Arg Val Pro Ala Pro Asp Thr Ser Ile Glu Glu Thr
 275 280 285
 Glu Ser Asp Ala Ser Ser Asp Ser Glu Asp Val Ser Ala Val Val Ala
 290 295 300
 Gln His Ser Leu Thr Gln Gln Arg Leu Leu Val Ser Asn Ala Asn Gln
 305 310 315 320
 Thr Val Pro Asp Arg Ser Asp Arg Ser Gly Thr Asp Arg Ser Val Ala
 325 330 335
 Gly Gly Gly Thr Val Ser Val Ser Val Arg Ser Arg Arg Pro Asp Gly
 340 345 350
 Gln Cys Thr Val Thr Glu Val
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<210> 5311

<211> 572

<212> DNA

<213> Homo sapiens

<400> 5311

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 120
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 180
 gagaagtgc agatgacgtc cagcgagcgc aggaagatca tgtgctcagt gacattccac
 240
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 300
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 420
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 572

<210> 5312

<211> 190

<212> PRT

<213> Homo sapiens

<400> 5312

Cys His Cys Glu Gly Asp Asp Glu Ser Pro Leu Ile Thr Pro Cys His

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Cys Thr Gly Ser Leu His Phe Val His Gln Ala Tyr Leu Gln Gln Trp			
	20	25	30
Ile Lys Ser Ser Asp Thr Arg Cys Cys Glu Leu Cys Lys Tyr Glu Phe			
	35	40	45
Ile Met Glu Thr Lys Leu Lys Pro Leu Arg Lys Trp Glu Lys Leu Gln			
	50	55	60
Met Thr Ser Ser Glu Arg Arg Lys Ile Met Cys Ser Val Thr Phe His			
65	70	75	80
Val Ile Ala Ile Thr Cys Val Val Trp Ser Leu Tyr Val Leu Ile Asp			
	85	90	95
Arg Pro Ala Glu Glu Ile Lys Gln Gly Gln Ala Thr Gly Ile Leu Glu			
	100	105	110
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Lys Arg Leu Lys Ala Tyr Asn Arg Val Ile Tyr Val Gln Asn Cys Pro			
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<211> 209

<212> PRT

<213> Homo sapiens

<400> 5322

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Asp	Ser	Pro	Asn	Val	Tyr	Thr	Glu	Lys	Lys	Glu	Ile	Ala	Ile	Leu	Arg
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Glu	Arg	Leu	Thr	Glu	Leu	Glu	Arg	Lys	Leu	Thr	Phe	Glu	Gln	Gln	Arg
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Ser	Asp	Leu	Trp	Glu	Arg	Leu	Tyr	Val	Glu	Ala	Lys	Asp	Gln	Asn	Gly
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Ala	Lys	Asn	Lys	Ser	Lys	Glu	Thr	Phe	Leu	Gly	Ser	Val	Lys	Glu	Thr
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		130				135					140				
Phe	Ser	Asp	Ser	Val	Lys	Ser	Thr	Phe	Arg	His	Phe	Lys	Asp	Thr	Thr
145				150					155					160	
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Glu	Ala	Ala	Glu	Lys	Pro	Arg	Thr	Val	Phe	Ser	Asp	Tyr	Leu	His	Pro

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<210> 5323
 <211> 475
 <212> DNA
 <213> Homo sapiens

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 35 40 45
 Gly Arg Arg Pro Tyr Lys Trp Arg Gly Val Gly Arg Lys Ala Trp Gln
 50 55 60
 Leu Trp Thr Ala Pro Arg Ser Leu Leu Leu Ser Val Gly Leu Ala Ser
 65 70 75 80
 Leu Arg Arg Ala Ser Gln His Ala Val Met Leu Pro Gln Leu Leu Ala
 85 90 95
 Val Ser Cys Leu Pro Asp Pro Gly Arg
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<210> 5325
 <211> 938
 <212> DNA
 <213> Homo sapiens

<400> 5325

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<210> 5326

<211> 234

<212> PRT

<213> Homo sapiens

<400> 5326

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		20						25					30		
Ala	Gly	Ser	Glu	Ser	Arg	Asp	Glu	Tyr	Ser	Tyr	Val	Val	Val	Gly	Ala
		35					40					45			
Gly	Ser	Ala	Gly	Cys	Val	Leu	Ala	Gly	Arg	Leu	Thr	Glu	Asp	Pro	Ala
		50				55				60					
Glu	Arg	Val	Leu	Leu	Leu	Glu	Ala	Gly	Pro	Lys	Asp	Val	Arg	Ala	Gly
65				70					75					80	
Ser	Lys	Arg	Leu	Ser	Trp	Lys	Ile	His	Met	Pro	Ala	Ala	Leu	Val	Ala
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<212> DNA
<213> Homo sapiens
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<211> 694

<212> PRT

<213> Homo sapiens

<400> 5328

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			20					25					30		
Arg	Cys	Val	Val	Ala	Ala	Phe	Trp	Ala	Asp	Val	Asp	Asn	Arg	Arg	Ala
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Gly	Asp	Val	Tyr	Tyr	Arg	Glu	Ala	Thr	Asp	Pro	Ala	Met	Leu	Arg	Arg

4500

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 Tyr Arg Phe Thr Gly Arg His Cys Glu Ile Gly Lys Pro Asp Ser Cys
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 Ala Ser Gly Pro Cys His Asn Gly Gly Thr Cys Phe His Tyr Ile Gly
 565 570 575
 Lys Tyr Lys Cys Asp Cys Pro Pro Gly Phe Ser Gly Arg His Cys Glu
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 Ile Ala Pro Ser Pro Cys Phe Arg Ser Pro Cys Val Asn Gly Gly Thr
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 Cys Glu Asp Arg Asp Thr Asp Phe Phe Cys His Cys Gln Ala Gly Tyr
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 Val Lys His Ala Thr Leu Arg Phe Asn Gly Thr Arg Leu Gly Ala Val
 645 650 655
 Ala Leu Tyr Ala Cys Asp Arg Gly Tyr Ser Leu Ser Ala Pro Ser Arg
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<210> 5329

<211> 2582

<212> DNA

<213> Homo sapiens

<400> 5329

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<211> 308

<212> PRT

<213> Homo sapiens

<400> 5330

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Ala	Leu	Arg	Lys	Lys	Glu	Leu	Asp	Glu	Glu	Glu	Ser	Ile	Arg	Lys	Lys
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Ala	Val	Gln	Phe	Gly	Thr	Gly	Glu	Leu	Cys	Asp	Ala	Ile	Ser	Ala	Val
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Glu	Glu	Lys	Val	Ser	Tyr	Leu	Arg	Pro	Leu	Asp	Phe	Glu	Glu	Ala	Arg
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Glu	Leu	Phe	Leu	Leu	Gly	Gln	His	Tyr	Val	Phe	Glu	Ala	Lys	Glu	Phe
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Phe	Gln	Ile	Asp	Gly	Tyr	Val	Thr	Asp	His	Ile	Glu	Val	Val	Gln	Asp
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<212> DNA

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<212> DNA

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	50					55				60					
Asn	Lys	Asn	Phe	Pro	Asn	Asn	Gln	Ser	Trp	Asn	Ser	Ser	Leu	Ser	Gly
65					70					75				80	
Pro	Arg	Leu	Leu	Phe	Lys	Ser	Gln	Ala	Asn	Gln	Asn	Tyr	Ala	Gly	Ala
			85						90					95	
Lys	Phe	Ser	Glu	Pro	Pro	Ser	Pro	Ser	Val	Leu	Pro	Lys	Pro	Pro	Ser
			100					105				110			
His	Trp	Val	Pro	Val	Ser	Phe	Asn	Pro	Ser	Asp	Lys	Glu	Ile	Met	Thr
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Phe	Gln	Leu	Lys	Thr	Leu	Leu	Lys	Val	Gln	Val					
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<210> 5339

<211> 847

<212> DNA

<213> Homo sapiens

<400> 5339

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 180
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 240
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 300
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 360

gatgctctta atgaaattgt gcgatgtatt tgtgagatgg atgaggagaa tggcttcattg
 420
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 480
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 540
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 720
 aagaataaac atcatcctga ccttcattctc tgggcttggt ccggaagcg aaaagaccaa
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 840
 aaaaaaa
 847

<210> 5340

<211> 217

<212> PRT

<213> Homo sapiens

<400> 5340

His	Glu	Asn	Arg	Lys	Val	Val	Leu	Ser	Ile	Leu	Phe	Val	Tyr	Ile	Leu
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Asp	Leu	Ser	Asp	Val	Asp	Phe	Leu	Asp	Asp	Ser	Ser	Thr	Glu	Ser	Leu
			20					25					30		
Leu	Leu	Ser	Gly	Asp	Glu	Tyr	Asn	Gln	Asp	Phe	Asp	Ser	Thr	Asn	Phe
	35						40					45			
Glu	Glu	Ser	Gln	Asp	Glu	Asp	Asp	Ala	Leu	Asn	Glu	Ile	Val	Arg	Cys
	50					55					60				
Ile	Cys	Glu	Met	Asp	Glu	Glu	Asn	Gly	Phe	Met	Ile	Gln	Cys	Glu	Glu
65					70				75					80	
Cys	Leu	Cys	Trp	Gln	His	Ser	Val	Cys	Met	Gly	Leu	Leu	Glu	Glu	Ser
			85					90					95		
Ile	Pro	Glu	Gln	Tyr	Ile	Cys	Tyr	Ile	Cys	Arg	Asp	Pro	Pro	Gly	Gln
		100						105					110		
Arg	Trp	Ser	Ala	Lys	Tyr	Arg	Tyr	Asp	Lys	Glu	Trp	Leu	Asn	Asn	Gly
	115						120					125			
Arg	Met	Cys	Gly	Leu	Ser	Phe	Phe	Lys	Glu	Asn	Tyr	Ser	His	Leu	Asn
	130					135					140				
Ala	Lys	Lys	Ile	Val	Ser	Thr	His	His	Leu	Leu	Ala	Asp	Val	Tyr	Gly
145					150					155				160	
Val	Thr	Glu	Val	Leu	His	Gly	Leu	Gln	Leu	Lys	Ile	Gly	Ile	Leu	Lys
			165					170					175		
Asn	Lys	His	His	Pro	Asp	Leu	His	Leu	Trp	Ala	Cys	Ser	Gly	Lys	Arg
		180					185					190			
Lys	Asp	Gln	Asp	Gln	Ile	Ile	Ala	Gly	Val	Glu	Lys	Lys	Ile	Ala	Gln
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Asp	Thr	Val	Asn	Arg	Glu	Glu	Lys	Lys							
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<210> 5341
<211> 2455
<212> DNA
<213> Homo sapiens

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720
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1320
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<210> 5342
<211> 690
<212> PRT
<213> Homo sapiens
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<400> 5342																
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Leu	Trp	Gly	Leu	Gly	Gln	Pro	Val	Trp	Pro	Val	Ala	Val	Ala	Val	Leu	Thr
		20						25					30			
Leu	Arg	Trp	Leu	Leu	Gly	Asp	Pro	Thr	Cys	Cys	Val	Leu	Leu	Gly	Leu	
		35				40						45				
Ala	Met	Leu	Ala	Arg	Pro	Trp	Leu	Gly	Pro	Trp	Val	Pro	His	Gly	Leu	
	50					55					60					
Ser	Leu	Ala	Ala	Ala	Ala	Leu	Ala	Leu	Thr	Leu	Leu	Pro	Ala	Arg	Leu	
65					70					75				80		
Pro	Pro	Gly	Leu	Arg	Trp	Leu	Pro	Ala	Asp	Val	Ile	Phe	Leu	Ala	Lys	
				85					90					95		
Ile	Leu	His	Leu	Gly	Leu	Lys	Ile	Arg	Gly	Cys	Leu	Ser	Arg	Gln	Pro	

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Pro Asp Thr Phe Val Asp Ala Phe Glu Arg Arg Ala Arg Ala Gln Pro		
115	120	125
Gly Arg Ala Leu Leu Val Trp Thr Gly Pro Gly Ala Gly Ser Val Thr		
130	135	140
Phe Gly Glu Leu Asp Ala Arg Ala Cys Gln Ala Ala Trp Ala Leu Lys		
145	150	155
Ala Glu Leu Gly Asp Pro Ala Ser Leu Cys Ala Gly Glu Pro Thr Ala		
165	170	175
Leu Leu Val Leu Ala Ser Gln Ala Val Pro Ala Leu Cys Met Trp Leu		
180	185	190
Gly Leu Ala Lys Leu Gly Cys Pro Thr Ala Trp Ile Asn Pro His Gly		
195	200	205
Arg Gly Met Pro Leu Ala His Ser Val Leu Ser Ser Gly Ala Arg Val		
210	215	220
Leu Val Val Asp Pro Asp Leu Arg Glu Ser Leu Glu Glu Ile Leu Pro		
225	230	235
Lys Leu Gln Ala Glu Asn Ile Arg Cys Phe Tyr Leu Ser His Thr Ser		
245	250	255
Pro Thr Pro Gly Val Gly Ala Leu Gly Ala Ala Leu Asp Ala Ala Pro		
260	265	270
Ser His Pro Val Pro Ala Asp Leu Arg Ala Gly Ile Thr Trp Arg Ser		
275	280	285
Pro Ala Leu Phe Ile Tyr Thr Ser Gly Thr Thr Gly Leu Pro Lys Pro		
290	295	300
Ala Ile Leu Thr His Glu Arg Val Leu Gln Met Ser Lys Met Leu Ser		
305	310	315
Leu Ser Gly Ala Thr Ala Asp Asp Val Val Tyr Thr Val Leu Pro Leu		
325	330	335
Tyr His Val Met Gly Leu Val Val Gly Ile Leu Gly Cys Leu Asp Leu		
340	345	350
Gly Ala Thr Cys Val Leu Ala Pro Lys Phe Ser Thr Ser Cys Phe Trp		
355	360	365
Asp Asp Cys Arg Gln His Gly Val Thr Val Ile Leu Tyr Val Gly Glu		
370	375	380
Leu Leu Arg Tyr Leu Cys Asn Ile Pro Gln Gln Pro Glu Asp Arg Thr		
385	390	395
His Thr Val Arg Leu Ala Met Gly Asn Gly Leu Arg Ala Asp Val Trp		
405	410	415
Glu Thr Phe Gln Gln Arg Phe Gly Pro Ile Arg Ile Trp Glu Val Tyr		
420	425	430
Gly Ser Thr Glu Gly Asn Met Gly Leu Val Asn Tyr Val Gly Arg Cys		
435	440	445
Gly Ala Leu Gly Lys Met Ser Cys Leu Leu Arg Met Leu Ser Pro Phe		
450	455	460
Glu Leu Val Gln Phe Asp Met Glu Ala Ala Glu Pro Val Arg Asp Asn		
465	470	475
Gln Gly Phe Cys Ile Pro Val Gly Leu Gly Glu Pro Gly Leu Leu Leu		
485	490	495
Thr Lys Val Val Ser Gln Gln Pro Phe Val Gly Tyr Arg Gly Pro Arg		
500	505	510
Glu Leu Ser Glu Arg Lys Leu Val Arg Asn Val Arg Gln Ser Gly Asp		
515	520	525
Val Tyr Tyr Asn Thr Gly Asp Val Leu Ala Met Asp Arg Glu Gly Phe		

530 535 540
 Leu Tyr Phe Arg Asp Arg Leu Gly Asp Thr Phe Arg Trp Lys Gly Glu
 545 550 555 560
 Asn Val Ser Thr His Glu Val Glu Gly Val Leu Ser Gln Val Asp Phe
 565 570 575
 Leu Gln Gln Val Asn Val Tyr Gly Val Cys Val Pro Gly Cys Glu Gly
 580 585 590
 Lys Val Gly Met Ala Ala Val Gln Leu Ala Pro Gly Gln Thr Phe Asp
 595 600 605
 Gly Glu Lys Leu Tyr Gln His Val Arg Ala Trp Leu Pro Ala Tyr Ala
 610 615 620
 Thr Pro His Phe Ile Arg Ile Gln Asp Ala Met Glu Val Thr Ser Thr
 625 630 635 640
 Phe Lys Leu Met Lys Thr Arg Leu Val Arg Glu Gly Phe Asn Val Gly
 645 650 655
 Ile Val Val Asp Pro Leu Phe Val Leu Asp Asn Arg Ala Gln Ser Phe
 660 665 670
 Arg Pro Leu Thr Ala Glu Met Tyr Gln Ala Val Cys Glu Gly Thr Trp
 675 680 685
 Lys Leu
 690

<210> 5343

<211> 752

<212> DNA

<213> Homo sapiens

<400> 5343

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 420
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 600
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 752

<210> 5344
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 5344
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 Glu Arg Ser Phe Phe Leu Lys Lys Arg Arg Ala Asp Phe Val Ala Gly
 35 40 45
 Ser Leu Ser Gly Arg Val Ile Val Ala Gly Gly Leu Gly Asn Gln Pro
 50 55 60
 Thr Val Leu Glu Thr Ala Glu Ala Phe His Pro Gly Lys Asn Lys Trp
 65 70 75 80
 Glu Ile Leu Pro Ala Met Pro Thr Pro Arg Cys Ala Cys Ser Ser Ile
 85 90 95
 Val Val Lys Asn Cys Leu Leu Ala Val Gly Gly Val Asn Gln Gly Leu
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<210> 5345
 <211> 1912
 <212> DNA
 <213> Homo sapiens

<400> 5345
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<210> 5346

<211> 534

<212> PRT

<213> Homo sapiens

<400> 5346

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 Ser Val Lys Ala Leu Leu Leu Lys Gly Lys Ala Pro Val Asp Pro Glu
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 Cys Thr Ala Lys Val Gly Lys Ala His Val Tyr Cys Glu Gly Asn Asp

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Lys Tyr Tyr Leu Ile Gln Leu Leu Glu Asp Asp Ala Gln Arg Asn Phe		80
	85	90
Ser Val Trp Met Arg Trp Gly Arg Val Gly Lys Met Gly Gln His Ser		95
	100	105
Leu Val Ala Cys Ser Gly Asn Leu Asn Lys Ala Lys Glu Ile Phe Gln		110
	115	120
Lys Lys Phe Leu Asp Lys Thr Lys Asn Asn Trp Glu Asp Arg Glu Lys		125
	130	135
Phe Glu Lys Val Pro Gly Lys Tyr Asp Met Leu Gln Met Asp Tyr Ala		140
145	150	155
Thr Asn Thr Gln Asp Glu Glu Glu Thr Lys Lys Glu Glu Ser Leu Lys		160
	165	170
Ser Pro Leu Lys Pro Glu Ser Gln Leu Asp Leu Arg Val Gln Glu Leu		175
	180	185
Ile Lys Leu Ile Cys Asn Val Gln Ala Met Glu Glu Met Met Met Glu		190
	195	200
Met Lys Tyr Asn Thr Lys Lys Ala Pro Leu Gly Lys Leu Thr Val Ala		205
	210	215
Gln Ile Lys Ala Gly Tyr Gln Ser Leu Lys Lys Ile Glu Asp Cys Ile		220
225	230	235
Arg Ala Gly Gln His Gly Arg Ala Leu Met Glu Ala Cys Asn Glu Phe		240
	245	250
Tyr Thr Arg Ile Pro His Asp Phe Gly Leu Arg Thr Pro Pro Leu Ile		255
	260	265
Arg Thr Gln Lys Glu Leu Ser Glu Lys Ile Gln Leu Leu Glu Ala Leu		270
	275	280
Gly Asp Ile Glu Ile Ala Ile Lys Leu Val Lys Thr Glu Leu Gln Ser		285
	290	295
Pro Glu His Pro Leu Asp Gln His Tyr Arg Asn Leu His Cys Ala Leu		300
305	310	315
Arg Pro Leu Asp His Glu Ser Tyr Glu Phe Lys Val Ile Ser Gln Tyr		320
	325	330
Leu Gln Ser Thr His Ala Pro Thr His Ser Asp Tyr Thr Met Thr Leu		335
	340	345
Leu Asp Leu Phe Glu Val Glu Lys Asp Gly Glu Lys Glu Ala Phe Arg		350
	355	360
Glu Asp Leu His Asn Arg Met Leu Leu Trp His Gly Ser Arg Met Ser		365
	370	375
Asn Trp Val Gly Ile Leu Ser His Gly Leu Arg Ile Ala Pro Pro Glu		380
385	390	395
Ala Pro Ile Thr Gly Tyr Met Phe Gly Lys Gly Ile Tyr Phe Ala Asp		400
	405	410
Met Ser Ser Lys Ser Ala Asn Tyr Cys Phe Ala Ser Arg Leu Lys Asn		415
	420	425
Thr Gly Leu Leu Leu Leu Ser Glu Val Ala Leu Gly Gln Cys Asn Glu		430
	435	440
Leu Leu Glu Ala Asn Pro Lys Ala Glu Gly Leu Leu Gln Gly Lys His		445
	450	455
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<210> 5347<211> 2893
<212> DNA
<213> Homo sapiens
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4522

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2580
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2700
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2760
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 2880
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 2893

<210> 5348
 <211> 694
 <212> PRT
 <213> Homo sapiens

<400> 5348
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 Leu Gly Gly Pro Ala Ser Ser Ala Tyr Ala Leu Ser Pro Phe Ser Ala
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 Ser Gly Gly Trp Gly Arg Ala Gly His Leu His Pro Lys Gly Arg Glu
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 Ala Leu Gly Val Pro Phe Val Pro Arg Thr Ser Val Asp Ala Trp Leu
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 Arg Ser Gly Pro Leu Asp Ala Gly Glu Glu Glu Lys Ala Pro Ala Glu
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 Gln Asn Asp Asp Asp Glu Asn Lys Ile Ala Glu Lys Pro Asp Trp Glu
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 Gly Ser Ile Ser Asp Gly Met Asn Ser Ser Ala His Tyr His Val Asn
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 Gln Ser Gln Glu Pro Phe Leu Gln Leu Asn Ser His Thr Thr Asn Pro


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Asp Ile Asn Ile Phe Asp Glu Ile Asn Leu Met Ser Leu Ala Thr Glu
385      390      395      400
Asp Asn Phe Asp Pro Ile Asp Val Ser Gln Leu Phe Asp Glu Ser Asp
      405      410      415
Ser Asp Ser Gly Leu Ser Leu Asp Ser Ser His Asn Asn Thr Ser Val
      420      425      430
Ile Lys Ser Asn Ser Ser His Ser Val Cys Asp Glu Gly Ala Ile Gly
      435      440      445
Tyr Cys Thr Asp His Glu Ser Ser Ser His His Asp Leu Glu Gly Ala
      450      455      460
Val Gly Gly Tyr Tyr Pro Glu Pro Ser Lys Leu Cys His Leu Asp Gln
465      470      475      480
Ser Asp Ser Asp Phe His Gly Asp Leu Thr Phe Gln His Val Phe His
      485      490      495
Asn His Thr Tyr His Leu Gln Pro Thr Ala Pro Glu Ser Thr Ser Glu
      500      505      510
Pro Phe Pro Trp Pro Gly Lys Ser Gln Lys Ile Arg Ser Arg Tyr Leu
      515      520      525
Glu Asp Thr Asp Arg Asn Leu Ser Arg Asp Glu Gln Arg Ala Lys Ala
      530      535      540
Leu His Ile Pro Phe Ser Val Asp Glu Ile Val Gly Met Pro Val Asp
545      550      555      560
Ser Phe Asn Ser Met Leu Ser Arg Tyr Tyr Leu Thr Asp Leu Gln Val
      565      570      575
Asp Ile Arg Arg Arg Gly Lys Asn Lys Val Ala Ala
      580      585      590
Gln Asn Cys Arg Lys Arg Lys Leu Asp Ile Ile Leu Asn Leu Glu Asp
      595      600      605
Asp Val Cys Asn Leu Gln Ala Lys Lys Glu Thr Leu Lys Arg Glu Gln
      610      615      620
Ala Gln Cys Asn Lys Ala Ile Asn Ile Met Lys Gln Lys Leu His Asp
625      630      635      640
Leu Tyr His Asp Ile Phe Ser Arg Leu Arg Asp Asp Gln Gly Arg Pro
      645      650      655
Val Asn Pro Asn His Tyr Ala Leu Gln Cys Thr His Asp Gly Ser Ile
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Leu Ile Val Pro Lys Glu Leu Val Ala Ser Gly His Lys Lys Glu Thr
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<210> 5349

<211> 425

<212> DNA

<213> Homo sapiens

<400> 5349

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 <212> PRT
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 35 40 45
 His Lys Val Ser Ser Gln Glu Gly Glu Gly Arg Ile Pro Leu Pro Gly
 50 55 60
 Lys Ala Glu Val Arg Glu Ala Gly Gln Pro Ile Pro Val Ser Leu Leu
 65 70 75 80
 Leu Leu Ser Pro Lys Lys Ala Leu Thr Leu Leu Ala Thr Ala Gln Gly
 85 90 95
 Gly His Glu Gly Leu Gly Arg Leu Leu Trp Gln Ser Gly Pro Leu Gln
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 Val Ser Lys Pro Ser Leu Phe Ser Ser Val Gln Leu Tyr Arg Gln Ser
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 <212> PRT
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<400> 5354
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 35 40 45
 Gln Val Cys Gln Phe Ser Asn Val Leu Arg Lys Gln Gly Ile Gln Lys
 50 55 60
 Gly Asp Arg Val Ala Ile Tyr Met Pro Met Ile Pro Glu Leu Val Val
 65 70 75 80
 Ala Met Leu Ala Cys Ala Arg Ile Gly Ala Leu His Ser Ile Val Phe
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 Ala Gly Phe Ser Ser Glu Ser Leu Cys Glu Arg Ile Leu Asp Ser Ser
 100 105 110
 Cys Ser Leu Leu Ile Thr Thr Asp Ala Phe Tyr Arg Gly Glu Lys Leu
 115 120 125
 Val Asn Leu Lys Glu Leu Ala Asp Glu Ala Leu Gln Lys Cys Gln Glu
 130 135 140
 Lys Gly Phe Pro Val Arg Cys Cys Ile Val Val Lys His Leu Gly Arg
 145 150 155 160
 Ala Glu Leu Gly Met Gly Thr Pro Pro Ala Ser Pro Pro Gln Leu Arg
 165 170 175
 Gly His Ala Asp Val Gln Ile Ser Trp Asn Gln Gly Ile Asp Leu Trp
 180 185 190
 Trp His Glu Leu Met Gln Glu Ala Gly Asp Glu Cys Glu Pro Glu Trp
 195 200 205
 Cys Asp Ala Glu Asp Pro Leu Phe Ile Leu Tyr Thr Ser Gly Ser Thr
 210 215 220
 Gly Lys Pro Lys Gly Val Val His Thr Val Gly Gly Tyr Met Leu Tyr
 225 230 235 240
 Val Ala Thr Thr Phe Lys Tyr Val Phe Asp Phe His Ala Glu Asp Val
 245 250 255
 Phe Trp Cys Thr Ala Asp Ile Gly Trp Ile Thr Gly His Ser Tyr Val
 260 265 270
 Thr Tyr Gly Pro Leu Ala Asn Gly Ala Thr Ser Val Leu Phe Glu Gly

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290	295	300
Tyr Lys Val Thr Lys Phe Tyr Thr Ala Pro Thr Ala Ile Arg Leu Leu		
305	310	315
Met Lys Phe Gly Asp Glu Pro Val Thr Lys His Ser Arg Ala Ser Leu		
325	330	335
Gln Val Leu Gly Thr Val Gly Glu Pro Ile Asn Pro Glu Ala Trp Leu		
340	345	350
Trp Tyr His Arg Val Val Gly Ala Gln Arg Cys Pro Ile Val Asp Thr		
355	360	365
Phe Trp Gln Thr Glu Thr Gly Gly His Met Leu Thr Pro Leu Pro Val		
370	375	380
Pro Thr Pro Met Lys Pro Gly Ser Ala Thr Phe Pro Phe Phe Gly Val		
385	390	395
Ala Pro Ala Ile Leu Asn Glu Ser Gly Glu Glu Leu Glu Gly Glu Ala		
405	410	415
Glu Gly Tyr Leu Val Phe Lys Gln Pro Trp Pro Gly Ile Met Arg Thr		
420	425	430
Val Tyr Gly Asn His Glu Arg Phe Glu Thr Thr Tyr Ser Lys Lys Phe		
435	440	445
Pro Gly Tyr Tyr Val Thr Gly Asp Gly Cys Gln Arg Asp Gln Asp Gly		
450	455	460
Tyr Tyr Trp Ile Thr Gly Arg Ile Asp Asp Met Leu Asn Val Ser Gly		
465	470	475
His Leu Leu Ser Thr Ala Glu Val Glu Ser Ala Leu Val Glu His Glu		
485	490	495
Ala Val Ala Glu Ala Ala Val Val Gly His Pro His Pro Val Lys Gly		
500	505	510
Glu Cys Leu Tyr Cys Phe Val Thr Leu Cys Asp Gly His Thr Phe Ser		
515	520	525
Pro Lys Leu Thr Glu Glu Leu Lys Lys Gln Ile Arg Glu Lys Ile Gly		
530	535	540
Pro Ile Ala Thr Pro Asp Tyr Ile Gln Asn Ala Pro Gly Leu Pro Lys		
545	550	555
Thr Arg Ser Gly Lys Ile Met Arg Arg Val Leu Arg Lys Ile Ala Gln		
565	570	575
Asn Asp His Asp Leu Gly Asp Met Ser Thr Val Ala Asp Pro Ser Val		
580	585	590
Ile Ser His Leu Phe Ser His Arg Cys Leu Thr Ile Gln		
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<211> 1596

<212> DNA

<213> Homo sapiens

<400> 5355

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<211> 245

<212> PRT

<213> Homo sapiens

<400> 5356

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 Tyr Ser Ser Asn Val Glu Leu Ala Ser Phe His Ser Thr Ser Lys Gly
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 Leu Cys Pro Pro Val Ser Gly Gln Ala Ala Met Asp Ile Val Val Asn
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 Pro Pro Val Ala Gly Glu Glu Ser Phe Glu Gln Phe Ser Arg Glu Lys
 115 120 125
 Glu Ser Val Leu Gly Asn Leu Ala Lys Lys Ala Lys Leu Thr Glu Asp
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 Leu Phe Asn Gln Val Pro Gly Ile His Cys Asn Pro Leu Gln Gly Ala
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 165 170 175
 Ala Gln Ala His Gln Met Ala Pro Asp Met Phe Tyr Cys Met Lys Leu
 180 185 190
 Leu Glu Glu Thr Gly Ile Cys Val Val Pro Gly Ser Gly Phe Gly Gln
 195 200 205
 Arg Glu Gly Thr Tyr His Phe Arg Met Thr Ile Leu Pro Pro Val Glu
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<210> 5357

<211> 1722

<212> DNA

<213> Homo sapiens

<400> 5357

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<212> PRT

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5360

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 His Phe Ala Arg Val Asn Phe Glu Glu Phe Lys Glu Gly Phe Val Ala
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 Val Leu Ser Ser Asn Ala Gly Val Arg Pro Ser Asp Glu Asp Ser Ser
 100 105 110
 Ser Leu Glu Ser Ala Ala Ser Ser Ala Ile Pro Pro Lys Tyr Val Asn
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 Gly Ser Lys Trp Tyr Gly Arg Arg Ser Arg Pro Glu Leu Cys Asp Ala
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 Lys Ser His Leu Trp Arg Ser Ala Ser Leu Glu Ser Val Glu Ser Pro
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 Phe Glu Ala Gln Gly Gln Leu Gln Thr Trp Asp Ser Glu Asp Phe Gly
 195 200 205
 Ser Pro Gln Lys Ser Cys Ser Pro Ser Phe Asp Thr Pro Glu Ser Gln
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 Ile Arg Gly Val Trp Glu Glu Leu Gly Val Gly Ser Ser Gly His Leu
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 Ser Glu Gln Glu Leu Ala Val Val Cys Gln Ser Val Gly Leu Gln Gly
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Glu Trp Asp Val Gly Arg Leu Gln Ala Glu Glu Ala Gly Leu Arg Glu
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 <213> Homo sapiens

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<211> 165

<212> PRT

<213> Homo sapiens

<400> 5362

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<212> DNA

<213> Homo sapiens

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<210> 5364

<211> 187

<212> PRT

<213> Homo sapiens

<400> 5364

Ala	Ala	Leu	Pro	Ser	Arg	Cys	Pro	Leu	Gln	Pro	Arg	Gln	Pro	Trp	Arg
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Arg	Trp	Arg	Lys	Arg	Ala	Leu	Gly	Arg	Leu	Gln	Gly	Xaa	Gly	Pro	Gln
			20					25					30		
Pro	Gly	Leu	Tyr	Ser	Tyr	Ile	Arg	Asp	Asp	Leu	Phe	Thr	Ser	Glu	Ile
		35					40					45			
Phe	Lys	Leu	Glu	Leu	Gln	Asn	Ala	Pro	Arg	His	Ala	Ser	Phe	Ser	Asp
	50				55					60					
Val	Arg	Arg	Phe	Leu	Gly	Arg	Phe	Gly	Leu	Gln	Pro	His	Lys	Thr	Lys
65				70					75						80
Leu	Phe	Gly	Gln	Pro	Pro	Cys	Ala	Phe	Val	Thr	Phe	Arg	Ser	Ala	Ala
				85					90					95	
Glu	Arg	Asp	Lys	Ala	Leu	Arg	Val	Leu	His	Gly	Ala	Leu	Trp	Lys	Gly
			100					105					110		
Arg	Pro	Leu	Ser	Val	Ala	Trp	Pro	Gly	Pro	Arg	Pro	Thr	Pro	Trp	Pro
		115					120						125		
Gly	Gly	Gly	Xaa	Gln	Glu	Gly	Glu	Ser	Glu	Pro	Pro	Val	Thr	Arg	Xaa
	130				135					140					
Gly	Arg	Arg	Gly	Asp	Pro	Ser	Met	Asp	Ser	Ala	Leu	Xaa	Leu	Ser	Ser
145				150						155					160
Leu	Ser	Gly	Ser	Ser	Trp	Ser	Ala	Ser	Arg	Cys	Cys	Arg	Asn	Xaa	Ala
				165					170					175	
Gln	Glu	Ile	Gly	Ser	Thr	Asn	Arg	Ala	Leu	Arg					
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<210> 5365

<211> 1824

<212> DNA

<213> Homo sapiens

<400> 5365

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360
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840
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<210> 5366

<211> 477

<212> PRT

<213> Homo sapiens

<400> 5366

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Ser	Ile	Cys	Leu	Asp	Tyr	Phe	Thr	Asp	Pro	Val	Met	Thr	Thr	Cys	Gly
			20					25					30		
His	Asn	Phe	Cys	Arg	Ala	Cys	Ile	Gln	Leu	Ser	Trp	Glu	Lys	Ala	Arg
		35					40					45			
Gly	Lys	Lys	Gly	Arg	Arg	Lys	Arg	Lys	Gly	Ser	Phe	Pro	Cys	Pro	Glu
	50					55					60				
Cys	Arg	Glu	Met	Ser	Pro	Gln	Arg	Asn	Leu	Leu	Pro	Asn	Arg	Leu	Leu
65					70					75				80	
Thr	Lys	Val	Ala	Glu	Met	Ala	Gln	Gln	His	Pro	Gly	Leu	Gln	Lys	Gln
				85				90						95	
Asp	Leu	Cys	Gln	Glu	His	His	Glu	Pro	Leu	Lys	Leu	Phe	Cys	Gln	Lys
			100					105					110		
Asp	Gln	Ser	Pro	Ile	Cys	Val	Val	Cys	Arg	Glu	Ser	Arg	Glu	His	Arg
		115					120					125			
Leu	His	Arg	Val	Leu	Pro	Ala	Glu	Glu	Ala	Val	Gln	Gly	Tyr	Lys	Leu
	130					135					140				
Lys	Leu	Glu	Glu	Asp	Met	Glu	Tyr	Leu	Arg	Glu	Gln	Ile	Thr	Arg	Thr
145					150					155				160	
Gly	Asn	Leu	Gln	Ala	Arg	Glu	Glu	Gln	Ser	Leu	Ala	Glu	Trp	Gln	Gly
			165					170						175	
Lys	Val	Lys	Glu	Arg	Arg	Glu	Arg	Ile	Val	Leu	Glu	Phe	Glu	Lys	Met
		180					185						190		
Asn	Leu	Tyr	Leu	Val	Glu	Glu	Glu	Arg	Leu	Leu	Gln	Ala	Leu	Glu	
	195					200					205				
Thr	Glu	Glu	Glu	Glu	Thr	Ala	Ser	Arg	Leu	Arg	Glu	Ser	Val	Ala	Cys
	210					215					220				
Leu	Asp	Arg	Gln	Gly	His	Ser	Leu	Glu	Leu	Leu	Leu	Gln	Leu	Glu	
225					230					235				240	
Glu	Arg	Ser	Thr	Gln	Gly	Pro	Leu	Gln	Met	Leu	Gln	Asp	Met	Lys	Glu
			245					250					255		
Pro	Leu	Ser	Arg	Lys	Asn	Asn	Val	Ser	Val	Gln	Cys	Pro	Glu	Val	Ala
		260					265						270		
Pro	Pro	Thr	Arg	Pro	Arg	Thr	Val	Cys	Arg	Val	Pro	Gly	Gln	Ile	Glu

275 280 285
 Val Leu Arg Gly Phe Leu Glu Asp Val Val Pro Asp Ala Thr Ser Ala
 290 295 300
 Tyr Pro Tyr Leu Leu Leu Tyr Glu Ser Arg Gln Arg Arg Tyr Leu Gly
 305 310 315 320
 Ser Ser Pro Glu Gly Ser Gly Phe Cys Ser Lys Asp Arg Phe Val Ala
 325 330 335
 Tyr Pro Cys Ala Val Gly Gln Thr Ala Phe Ser Ser Gly Arg His Tyr
 340 345 350
 Trp Glu Val Gly Met Asn Ile Thr Gly Asp Ala Leu Trp Ala Leu Gly
 355 360 365
 Val Cys Arg Asp Asn Val Ser Arg Lys Asp Arg Val Leu Lys Cys Pro
 370 375 380
 Glu Asn Gly Phe Trp Val Val Gln Leu Ser Lys Gly Thr Lys Tyr Leu
 385 390 395 400
 Ser Thr Phe Ser Ala Leu Thr Pro Val Met Leu Met Glu Pro Pro Ser
 405 410 415
 His Met Gly Ile Phe Leu Asp Phe Glu Ala Gly Glu Val Ser Phe Tyr
 420 425 430
 Ser Val Ser Asp Gly Ser His Leu His Thr Tyr Ser Gln Ala Thr Phe
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 Pro Gly Pro Leu Gln Pro Phe Cys Leu Gly Ala Pro Lys Ser Gly
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 Gln Met Val Ile Ser Thr Val Thr Met Trp Val Lys Gly
 465 470 475

<210> 5367

<211> 549

<212> DNA

<213> Homo sapiens

<400> 5367

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 120

gagtctcagg ggctggggat gctgcccccg aagcccccta cttttgggga gttcctgtcc
 180

cagcaciaag ctgaggccag cagccgcaga aggagaaaga gcagtcggcc ccaggccaag
 240

gcagcgccca gggcctacag tgaccatgat gaccgctggg agacaaaaga aggggcagca
 300

tccccagccc ctgagactcc acagcctact tccccgaga cttcccccaa ggagacaccc
 360

atcgagccac ccgagatccc agctcctgcc caccggcctc ctgaagacga gggggaagag
 420

aatgaggggg aagaggatga agaattgggag gacataagtg aggatgagga agaggaggag
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549

<210> 5368

<211> 137
 <212> PRT
 <213> Homo sapiens

<400> 5368
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 20 25 30
 Ala Lys Ala Ala Pro Arg Ala Tyr Ser Asp His Asp Asp Arg Trp Glu
 35 40 45
 Thr Lys Glu Gly Ala Ala Ser Pro Ala Pro Glu Thr Pro Gln Pro Thr
 50 55 60
 Ser Pro Glu Thr Ser Pro Lys Glu Thr Pro Met Gln Pro Pro Glu Ile
 65 70 75 80
 Pro Ala Pro Ala His Arg Pro Pro Glu Asp Glu Gly Glu Glu Asn Glu
 85 90 95
 Gly Glu Glu Asp Glu Glu Trp Glu Asp Ile Ser Glu Asp Glu Glu Glu
 100 105 110
 Glu Glu Ile Glu Val Glu Glu Gly Asp Glu Glu Glu Pro Ala Gln Asp
 115 120 125
 His Gln Ala Pro Glu Ala Ala Pro Thr
 130 135

<210> 5369
 <211> 646
 <212> DNA
 <213> Homo sapiens

<400> 5369
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 120
 cagcagcagc agctcctgca gcccgggccc tcgcccgtgg gcagcagcgg gcccgagccc
 180
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 240
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 300
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 360
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 420
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 480
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<210> 5370

<211> 148
 <212> PRT
 <213> Homo sapiens

<400> 5370
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 His Leu Asp Glu Lys Asp Leu Lys Pro Leu Phe Glu Gln Phe Gly Arg
 20 25 30
 Ile Tyr Glu Leu Thr Val Leu Lys Asp Pro Tyr Thr Gly Met His Lys
 35 40 45
 Gly Gly Arg Pro Ala Pro Ser Pro Leu Ser Pro Ser Leu Arg Leu Pro
 50 55 60
 Pro His Leu Pro Ala Ser Ser Leu Pro His His His Pro Ser Ser Ala
 65 70 75 80
 His Leu Pro Pro Leu Pro Ala Ser Ala Gly Ala Ser Val Leu Thr Pro
 85 90 95
 Ser Leu Pro Pro Thr Pro Pro Pro Leu Ser Gly Gly Ala Ala Asp Arg
 100 105 110
 Ser Glu Arg Ala Pro Ser Pro Pro Pro Pro Leu Pro Pro Ser Pro
 115 120 125
 Pro Ser Gly Ile Ser Ser Leu Ser Pro Ser Leu Ser Pro Ser Leu Ser
 130 135 140
 Pro Phe Leu Phe
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<210> 5371
 <211> 1177
 <212> DNA
 <213> Homo sapiens

<400> 5371
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 180
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 360
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<210> 5372

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5372

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Pro	Ser	Leu	Gln	Ser	Pro	Gln	Thr	Glu	Leu	Arg	Ser	Asp	Phe	Gln	Cys
		20						25					30		
Val	Val	Gly	Phe	Gly	Gly	Ile	His	Ser	Thr	Pro	Ser	Thr	Val	Leu	Ser
		35				40						45			
Asp	Gln	Ala	Lys	Tyr	Leu	Asn	Pro	Leu	Leu	Gly	Glu	Trp	Lys	His	Phe
	50					55				60					
Thr	Ala	Ser	Leu	Ala	Pro	Arg	Met	Ser	Asn	Gln	Gly	Ile	Ala	Val	Leu
65					70					75				80	
Asn	Asn	Phe	Val	Tyr	Leu	Ile	Gly	Gly	Asp	Asn	Asn	Val	Gln	Gly	Phe
			85					90					95		
Arg	Ala	Glu	Ser	Arg	Cys	Trp	Arg	Tyr	Asp	Pro	Arg	His	Asn	Arg	Trp
			100					105					110		
Xaa	Pro	Asp	Pro	Val	Pro	Ala	Ala	Gly	Ala	Arg	Arg	Pro	Val	Xaa	Val
		115				120						125			
Cys	Val	Val	Gly	Arg	Tyr	Ile	Tyr	Ala	Val	Ala	Gly	Arg	Asp	Tyr	His
	130					135					140				
Asn	Asp	Leu	Asn	Ala	Val	Glu	Arg	Tyr	Asp	Pro	Ala	Thr	Asn	Ser	Trp
145					150				155					160	
Ala	Tyr	Val	Ala	Pro	Leu	Lys	Arg	Glu	Val	Tyr	Ala	His	Ala	Gly	Ala
				165					170					175	
Thr	Leu	Glu	Gly	Lys	Met	Tyr	Ile	Thr	Cys	Gly	Arg	Arg	Gly	Glu	Asp
			180					185					190		
Tyr	Leu	Lys	Glu	Thr	His	Cys	Tyr	Asp	Pro	Gly	Ser	Asn	Thr	Trp	His
		195				200						205			
Thr	Leu	Ala	Asp	Gly	Pro	Val	Arg	Arg	Ala	Trp	His	Gly	Met	Ala	Thr
	210					215					220				
Leu	Leu	Asn	Lys	Leu	Tyr	Val	Ile	Gly	Gly	Ser	Asn	Asn	Asp	Ala	Gly

225		230		235		240									
Tyr	Arg	Arg	Asp	Val	His	Gln	Val	Ala	Cys	Tyr	Ser	Cys	Thr	Ser	Gly
		245		250		255									
Gln	Trp	Ser	Ser	Val	Cys	Pro	Leu	Pro	Ala	Gly	His	Gly	Glu	Pro	Gly
		260		265		270									
Ile	Ala	Val	Leu	Asp	Asn	Arg	Ile	Tyr	Val	Leu	Gly	Gly	Arg	Ser	His
		275		280		285									
Asn	Arg	Gly	Ser	Arg	Thr	Gly	Tyr	Val	His	Ile	Tyr	Asp	Val	Glu	Lys
		290		295		300									
Asp	Cys	Trp	Glu	Glu	Gly	Pro	Gln	Leu	Asp	Asn	Ser	Ile	Ser	Gly	Leu
		305		310		315									
Ala	Ala	Cys	Val	Leu	Thr	Leu	Pro	Arg	Ser	Leu	Leu	Leu	Glu	Pro	Pro
		325		330		335									
Arg	Gly	Thr	Pro	Asp	Arg	Ser	Gln	Ala	Asp	Pro	Asp	Phe	Ala	Ser	Glu
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<210> 5373

<211> 4221

<212> DNA

<213> Homo sapiens

<400> 5373

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<211> 886

<212> PRT

<213> Homo sapiens

<400> 5374

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[illegible]

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      805              810              815
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      820              825              830
Tyr Tyr Gln Lys Ala Leu Glu Leu Pro Pro Leu Val Val Glu Gly Ile
      835              840              845
Glu Leu Asp Gln Leu Asp Leu Arg Arg Asp Ile Ala Tyr Asn Leu Ser
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<210> 5375
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 <212> DNA
 <213> Homo sapiens

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<210> 5376
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Leu Gln Arg Ala Ala Ala Ser Ser Glu Ser Pro Val Ala Arg Thr Trp
      35      40      45
Val Gln Leu Lys Ser Ile Ser Leu Phe Ala Phe Ser Glu Ala Ser Pro

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Cys His Arg Pro Arg Thr Ile Ser Ile Phe Asn Pro Arg Asn His Thr				
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<210> 5377

<211> 1452

<212> DNA

<213> Homo sapiens

<400> 5377

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<212> PRT

<213> Homo sapiens

<400> 5378

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Arg	Ser	Gly	Leu	Arg	Leu	Gly	Ser	Arg	Gly	Leu	Cys	Thr	Arg	Leu	Ala
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Thr	Pro	Pro	Arg	Arg	Ala	Pro	Asp	Gln	Ala	Ala	Glu	Ile	Gly	Ser	Arg
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Gly	Ser	Thr	Lys	Ala	Gln	Gly	Pro	Gln	Gln	Gln	Pro	Gly	Ser	Glu	Gly
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Pro	Ser	Tyr	Ala	Lys	Lys	Val	Ala	Leu	Trp	Leu	Ala	Gly	Leu	Leu	Gly
				85					90					95	
Ala	Gly	Gly	Thr	Val	Ser	Val	Val	Tyr	Ile	Phe	Gly	Asn	Asn	Pro	Val
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Leu	Val	Gln	Gln	Leu	Arg	Arg	Thr	Tyr	Lys	Tyr	Phe	Lys	Asp	Tyr	Arg
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			180					185					190		
Lys	Lys	Arg	Pro	Gly	Ile	Glu	Thr	Leu	Phe	Gln	Gln	Leu	Ala	Pro	Leu
		195					200					205			
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		210				215					220				
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225					230				235					240	
Arg	Asp	Ala	Thr	Arg	Tyr	Met	Asp	Gly	His	His	Val	Lys	Asp	Ile	Ser
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Cys	Leu	Asn	Arg	Asp	Pro	Ala	Arg	Val	Val	Val	Val	Asp	Cys	Lys	Lys
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Glu	Ala	Phe	Arg	Leu	Gln	Pro	Tyr	Asn	Gly	Val	Ala	Leu	Arg	Pro	Trp
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Asp	Gly	Asn	Ser	Asp	Asp	Arg	Val	Leu	Leu	Asp	Leu	Ser	Ala	Phe	Leu

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His Tyr Ala Leu Glu Asp Asp Pro Leu Ala Ala Phe Lys Gln Arg Gln		320
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<210> 5379

<211> 3213

<212> DNA

<213> Homo sapiens

<400> 5379

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<211> 903

<212> PRT

<213> Homo sapiens

<400> 5380

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Ser	Cys	Ala	Pro	Ala	Leu	Leu	Gly	Ser	Gly	Cys	Gly	Ser	Gly	Glu	Ser
		35					40					45			
Cys	Asp	Arg	Gly	Cys	Leu	Ala	Ile	Leu	Ala	Ser	Thr	Ser	Ala	Thr	
	50					55				60					
Gln	Ala	Arg	Met	Val	Leu	Arg	Cys	Cys	Ser	Glu	Phe	Ile	Glu	Ala	His
	65				70					75					80
Gly	Val	Val	Asp	Gly	Ile	Tyr	Arg	Leu	Ser	Gly	Val	Ser	Ser	Asn	Ile
			85					90						95	
Gln	Arg	Leu	Arg	His	Glu	Phe	Asp	Ser	Glu	Arg	Ile	Pro	Glu	Leu	Ser
			100					105					110		
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Gly	Ser	Cys	Pro	Ser	Thr	Arg	Leu	Leu	Thr	Leu	Glu	Glu	Ala	Gln	Ala			
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Arg	Thr	Gln	Gly	Arg	Leu	Gly	Thr	Pro	Thr	Glu	Pro	Thr	Thr	Pro	Lys			
					290						295						300	
Ala	Pro	Ala	Ser	Pro	Ala	Glu	Arg	Arg	Lys	Gly	Glu	Arg	Gly	Glu	Lys			
305						310						315						320
Gln	Arg	Lys	Pro	Gly	Gly	Ser	Ser	Trp	Lys	Thr	Phe	Phe	Ala	Leu	Gly			
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Thr	Arg	Ala	Pro	Pro	Gln	Pro	Ser	Ala	Trp	Leu	Asp	Asp	Gly	Asp	Glu			
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Leu	Asp	Phe	Ser	Pro	Pro	Arg	Cys	Leu	Glu	Gly	Leu	Arg	Gly	Leu	Asp			
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Phe	Asp	Pro	Leu	Thr	Phe	Arg	Cys	Ser	Ser	Pro	Thr	Pro	Gly	Asp	Pro			
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Pro	Pro	Ala	Val	Leu	Glu	Leu	Leu	Gly	Ala	Gly	Gly	Ala	Pro	Ala	Ser			
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Ala	Thr	Pro	Thr	Pro	Ala	Leu	Ser	Pro	Gly	Arg	Ser	Leu	Arg	Pro	His			
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Leu	Ile	Pro	Leu	Leu	Leu	Arg	Gly	Ala	Glu	Ala	Pro	Leu	Thr	Asp	Ala			
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Cys	Gln	Gln	Glu	Met	Cys	Ser	Lys	Leu	Arg	Gly	Ala	Gln	Gly	Pro	Leu			
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Ala	Arg	Leu	Met	Ala	Leu	Ala	Leu	Ala	Glu	Arg	Ala	Gln	Gln	Val	Ala			
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Glu	Gln	Gln	Ser	Gln	Gln	Glu	Cys	Gly	Gly	Thr	Pro	Pro	Ala	Ser	Gln			
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Ser	Pro	Phe	His	Arg	Ser	Leu	Ser	Leu	Glu	Val	Gly	Gly	Glu	Pro	Leu			
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Leu																		

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 Pro Pro Ser Phe Gln Pro Ser Ser Pro Ala Pro Val Trp Arg Ser Ser
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 Leu Gly Pro Pro Ala Pro Leu Asp Arg Gly Glu Asn Leu Tyr Tyr Glu
 690 695 700
 Ile Gly Ala Ser Glu Gly Ser Pro Tyr Ser Gly Pro Thr Arg Ser Trp
 705 710 715 720
 Ser Pro Phe Arg Ser Met Pro Pro Asp Arg Leu Asn Ala Ser Tyr Gly
 725 730 735
 Met Leu Gly Gln Ser Pro Pro Leu His Arg Ser Pro Asp Phe Leu Leu
 740 745 750
 Ser Tyr Pro Pro Ala Pro Ser Cys Phe Pro Pro Asp His Leu Gly Tyr
 755 760 765
 Ser Ala Pro Gln His Pro Ala Arg Arg Pro Thr Pro Pro Glu Pro Leu
 770 775 780
 Tyr Val Asn Leu Ala Leu Gly Pro Arg Gly Pro Ser Pro Ala Ser Ser
 785 790 795 800
 Ser Ser Ser Ser Pro Pro Ala His Pro Arg Ser Arg Ser Asp Pro Gly
 805 810 815
 Pro Pro Val Pro Arg Leu Pro Gln Lys Gln Arg Ala Pro Trp Gly Pro
 820 825 830
 Arg Thr Pro His Arg Val Pro Gly Pro Trp Gly Pro Pro Glu Pro Leu
 835 840 845
 Leu Leu Tyr Arg Ala Ala Pro Pro Ala Tyr Gly Arg Gly Gly Glu Leu
 850 855 860
 His Arg Gly Ser Leu Tyr Arg Asn Gly Gly Gln Arg Gly Glu Gly Ala
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<210> 5381

<211> 1576

<212> DNA

<213> Homo sapiens

<400> 5381

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<210> 5382

<211> 223

<212> PRT

<213> Homo sapiens

<400> 5382

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 Ile Ser Gln Ala Trp Pro Gly Met Ala Arg Thr Ile Tyr Gly Asp His
 35 40 45
 Gln Arg Phe Val Asp Ala Tyr Phe Lys Ala Tyr Pro Gly Tyr Tyr Phe
 50 55 60
 Thr Gly Asp Gly Ala Tyr Arg Thr Glu Gly Gly Tyr Tyr Gln Ile Thr


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65          70          75          80
Gly Arg Met Asp Asp Val Ile Asn Ile Ser Gly His Arg Leu Gly Thr
          85          90          95
Ala Glu Ile Glu Asp Ala Ile Ala Asp His Pro Ala Val Pro Glu Ser
          100          105          110
Ala Val Ile Gly Tyr Pro His Asp Ile Lys Gly Glu Ala Ala Phe Ala
          115          120          125
Phe Ile Val Val Lys Asp Ser Ala Gly Asp Ser Asp Val Val Val Gln
          130          135          140
Glu Leu Lys Ser Met Val Ala Thr Lys Ile Ala Lys Tyr Ala Val Pro
145          150          155          160
Asp Glu Ile Leu Val Val Lys Arg Leu Pro Lys Thr Arg Ser Gly Lys
          165          170          175
Val Met Arg Arg Leu Leu Arg Lys Ile Ile Thr Ser Glu Ala Gln Glu
          180          185          190
Leu Gly Asp Thr Thr Thr Leu Glu Asp Pro Ser Ile Ile Ala Glu Ile
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Leu Ser Val Tyr Gln Lys Cys Lys Asp Lys Gln Ala Ala Ala Lys
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<210> 5383

<211> 2027

<212> DNA

<213> Homo sapiens

<400> 5383

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840

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<210> 5384

<211> 508

<212> PRT

<213> Homo sapiens

<400> 5384

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 Leu Asp Arg Pro Gln Gln Trp Leu Gln Leu Val Leu Leu Pro Pro Ala
 35 40 45
 Leu Phe Ile Pro Ser Thr Glu Asn Glu Glu Gln Arg Leu Ala Ser Ala

50	55	60
Arg Ala Val Pro Arg	Asn Val Gln Pro Tyr Val	Val Tyr Glu Glu Val
65	70	75
Thr Asn Val Trp Ile	Asn Val His Asp Ile Phe Tyr Pro Phe Pro Gln	80
	85	90
Ser Glu Gly Glu Asp	Glu Leu Cys Phe Leu Arg Ala Asn Glu Cys Lys	95
	100	105
Thr Gly Phe Cys His	Leu Tyr Lys Val Thr Ala Val Leu Lys Ser Gln	110
	115	120
Gly Tyr Asp Trp Ser	Glu Pro Phe Ser Pro Gly Glu Gly Glu Gln Ser	125
	130	135
Leu Thr Asn Ala Ile	Trp Val Asn Glu Glu Thr Lys Leu Val Tyr Phe	140
	145	150
Gln Gly Thr Lys Asp	Thr Pro Leu Glu His His Leu Tyr Val Val Ser	155
	165	170
Tyr Glu Ala Ala Gly	Glu Ile Val Arg Leu Thr Thr Pro Gly Phe Ser	175
	180	185
His Ser Cys Ser Met	Ser Gln Asn Phe Asp Met Phe Val Ser His Tyr	190
	195	200
Ser Ser Val Ser Thr	Pro Pro Cys Val His Val Tyr Lys Leu Ser Gly	205
	210	215
Pro Asp Asp Asp Pro	Leu His Lys Gln Pro Arg Phe Trp Ala Ser Met	220
	225	230
Met Glu Ala Ala Lys	Ile Phe His Phe His Thr Arg Ser Asp Val Arg	235
	245	250
Leu Tyr Gly Met Ile	Tyr Lys Pro His Ala Leu Gln Pro Gly Lys Lys	255
	260	265
His Pro Thr Val Leu	Phe Val Tyr Gly Gly Pro Gln Val Gln Leu Val	270
	275	280
Asn Asn Ser Phe Lys	Gly Ile Lys Tyr Leu Arg Leu Asn Thr Leu Ala	285
	290	295
Ser Leu Gly Tyr Ala	Val Val Val Ile Asp Gly Arg Gly Ser Cys Gln	300
	305	310
Arg Gly Leu Arg Phe	Glu Gly Ala Leu Lys Asn Gln Met Gly Gln Val	315
	325	330
Glu Ile Glu Asp Gln	Val Glu Gly Leu Gln Phe Val Ala Glu Lys Tyr	335
	340	345
Gly Phe Ile Asp Leu	Ser Arg Val Ala Ile His Gly Trp Ser Tyr Gly	350
	355	360
Gly Phe Leu Ser Leu	Met Gly Leu Ile His Lys Pro Gln Val Phe Lys	365
	370	375
Val Ala Ile Ala Gly	Ala Pro Val Thr Val Trp Met Ala Tyr Asp Thr	380
	385	390
Gly Tyr Thr Glu Arg	Tyr Met Asp Val Pro Glu Asn Asn Gln His Gly	395
	405	410
Tyr Glu Ala Gly Ser	Val Ala Leu His Val Glu Lys Leu Pro Asn Glu	415
	420	425
Pro Asn Arg Leu Leu	Ile Leu His Gly Phe Leu Asp Glu Asn Val His	430
	435	440
Phe Phe His Thr Asn	Phe Leu Val Ser Gln Leu Ile Arg Ala Gly Lys	445
	450	455
Pro Tyr Gln Leu Gln	Val Ala Leu Pro Pro Val Ser Pro Gln Ile Tyr	460
	465	470
Pro Asn Glu Arg His	Ser Ile Arg Cys Pro Glu Ser Gly Glu His Tyr	475
	480	

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<210> 5388

<211> 125

<212> PRT

<213> Homo sapiens

<400> 5388

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Gln	Met	Ala	Tyr	Thr	Ala	Thr	His	Gln	Ser	Met	Gly	Asn	Trp	Ser	Met
		20						25				30			
Phe	Thr	Trp	Cys	Phe	Cys	Phe	Ser	Met	Thr	Leu	Ile	Ile	Leu	Ile	Val
	35						40				45				
Glu	Leu	Cys	Gly	Leu	Gln	Ala	Arg	Phe	Pro	Leu	Ser	Trp	Arg	Asn	Phe
	50					55				60					
Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu	Phe	Cys	Leu	Ser	Ala	Ser
65				70					75					80	
Ile	Ile	Tyr	Pro	Thr	Thr	Tyr	Val	Gln	Phe	Leu	Ser	His	Gly	Arg	Ser
			85					90					95		
Arg	Asp	His	Ala	Ile	Ala	Ala	Thr	Phe	Phe	Ser	Cys	Ile	Ala	Cys	Val
		100						105					110		
Ala	Tyr	Ala	Thr	Glu	Met	Ala	Trp	Thr	Arg	Ala	Arg	Ala			
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<210> 5389

<211> 1711

<212> DNA

<213> Homo sapiens

<400> 5389

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<210> 5390

<211> 118

<212> PRT

<213> Homo sapiens

<400> 5390

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<210> 5392
<211> 55
<212> PRT
<213> Homo sapiens
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<400> 5392

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 Thr Ile Lys Gly His Cys Asn Leu Ser Leu Asn Leu Leu Gly Ser Ser
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 Asn Pro Pro Ala Ser Ala Ser
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<210> 5393

<211> 4837

<212> DNA

<213> Homo sapiens

<400> 5393

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<213> Homo sapiens

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<210> 5400
 <211> 186
 <212> PRT
 <213> Homo sapiens

<400> 5400
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 35 40 45
 Pro Gln Gln Ser Ser Pro Tyr Pro Gly Gly Ser Tyr Gly Pro Pro Gly
 50 55 60
 Pro Gln Arg Tyr Pro Ile Gly Ile Gln Gly Arg Thr Pro Gly Ala Met
 65 70 75 80
 Ala Gly Met Gln Tyr Pro Gln Gln Gln Met Pro Pro Gln Tyr Gly Gln
 85 90 95
 Gln Gly Val Ser Gly Tyr Cys Gln Gln Gly Gln Gln Pro Tyr Tyr Ser
 100 105 110
 Gln Gln Pro Gln Pro Pro His Leu Pro Pro Gln Ala Gln Tyr Leu Pro
 115 120 125
 Ser Gln Ser Gln Gln Arg Tyr Gln Pro Gln Gln Asp Met Ser Gln Glu
 130 135 140
 Gly Tyr Gly Thr Arg Ser Gln Pro Pro Leu Ala Pro Gly Lys Pro Asn
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<210> 5401
 <211> 2674
 <212> DNA
 <213> Homo sapiens

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1680

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 2160
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 2580
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<210> 5402

<211> 507

<212> PRT

<213> Homo sapiens

<400> 5402

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			20					25					30		
Pro	Arg	His	Val	Ala	Asp	Met	Val	Ile	Ser	Glu	Ser	Met	Asp	Ile	Leu
		35					40					45			
Phe	Arg	Ile	Arg	Gly	Gly	Leu	Asp	Leu	Ala	Phe	Gln	Leu	Ala	Thr	Pro
	50					55					60				
Asn	Glu	Ile	Phe	Leu	Lys	Lys	Ala	Leu	Lys	His	Val	Leu	Ser	Asp	Leu
65					70					75				80	
Ser	Thr	Lys	Leu	Ser	Ser	Asn	Ala	Leu	Val	Phe	Arg	Ile	Cys	His	Ser
				85					90					95	
Ser	Val	Tyr	Ile	Trp	Pro	Ser	Ser	Asp	Ile	Asn	Thr	Ile	Pro	Gly	Glu

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115	120	125
Glu Pro Glu Glu Asp Ile Lys Arg Lys Phe Met Arg Lys Lys Asp Lys		
130	135	140
Lys Leu Ser Asp Met His Gln Ile Val Asn Ile Asp Leu Met Leu Glu		
145	150	155
Met Ser Thr Ser Leu Ala Ala Val Thr Pro Ile Ile Glu Arg Glu Ser		
165	170	175
Gly Gly His His Tyr Val Asn Met Thr Leu Pro Val Asp Ala Val Ile		
180	185	190
Ser Val Ala Pro Glu Glu Thr Trp Gly Lys Val Arg Lys Leu Leu Val		
195	200	205
Asp Ala Ile His Asn Gln Leu Thr Asp Met Glu Lys Cys Ile Leu Lys		
210	215	220
Tyr Met Lys Arg Thr Ser Ile Val Val Pro Glu Pro Leu His Phe Leu		
225	230	235
Leu Pro Gly Lys Lys Asn Leu Val Thr Ile Ser Tyr Pro Ser Gly Ile		
245	250	255
Pro Asp Gly Gln Leu Gln Ala Tyr Arg Lys Glu Leu His Asp Leu Phe		
260	265	270
Asn Leu Pro His Asp Arg Pro Tyr Phe Lys Arg Ser Asn Ala Tyr His		
275	280	285
Phe Pro Asp Glu Pro Tyr Lys Asp Gly Tyr Ile Arg Asn Pro His Thr		
290	295	300
Tyr Leu Asn Pro Pro Asn Met Glu Thr Gly Met Ile Tyr Val Val Gln		
305	310	315
Gly Ile Tyr Gly Tyr His His Tyr Met Gln Asp Arg Ile Asp Asp Asn		
325	330	335
Gly Trp Gly Cys Ala Tyr Arg Ser Leu Gln Thr Ile Cys Ser Trp Phe		
340	345	350
Lys His Gln Gly Tyr Thr Glu Arg Ser Ile Pro Thr His Arg Glu Ile		
355	360	365
Gln Gln Ala Leu Val Asp Ala Gly Asp Lys Pro Ala Thr Phe Val Gly		
370	375	380
Ser Arg Gln Trp Ile Gly Ser Ile Glu Val Gln Leu Val Leu Asn Gln		
385	390	395
Leu Ile Gly Ile Thr Ser Lys Ile Leu Phe Val Ser Gln Gly Ser Glu		
405	410	415
Ile Ala Ser Gln Gly Arg Glu Leu Ala Asn His Phe Gln Ser Glu Gly		
420	425	430
Thr Pro Val Met Ile Gly Gly Gly Val Leu Ala His Thr Ile Leu Gly		
435	440	445
Val Ala Trp Asn Glu Ile Thr Gly Gln Ile Lys Phe Leu Ile Leu Asp		
450	455	460
Pro His Tyr Thr Gly Ala Glu Asp Leu Gln Val Ile Leu Glu Lys Gly		
465	470	475
Trp Cys Gly Trp Lys Gly Pro Asp Phe Trp Asn Lys Asp Ala Tyr Tyr		
485	490	495
Asn Leu Cys Leu Pro Gln Arg Pro Asn Met Ile		
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<210> 5403

<211> 451

<212> DNA

<213> Homo sapiens

<400> 5403

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 300
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<210> 5404

<211> 150

<212> PRT

<213> Homo sapiens

<400> 5404

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			20					25				30			
Ser	Pro	Ala	Leu	Thr	Met	Ala	Pro	Ser	Ser	Leu	Gly	Ala	Leu	Gly	Pro
		35				40					45				
Trp	Val	Gly	Ala	Leu	Glu	Leu	Pro	Arg	Leu	Gln	Ala	Pro	Leu	Ser	Gln
	50					55				60					
Pro	Gly	Thr	His	Ala	Gly	Ala	Xaa	Asp	Pro	Arg	Pro	Ser	Leu	Arg	Lys
65					70				75					80	
Ala	Ser	Leu	Arg	Ala	Ala	Ser	Pro	Ala	Ala	Ser	Ser	Ser	Pro	Trp	Ala
			85					90					95		
Arg	Val	Pro	Cys	Ser	Arg	Ala	Arg	Arg	Pro	Lys	Ser	Ala	Glu	Leu	Leu
		100						105					110		
Arg	Ile	Pro	Gly	Thr	Ser	Thr	Arg	Pro	Lys	Lys	Glu	Arg	Gly	Cys	Pro
	115					120					125				
Ser	Pro	Gly	Leu	Pro	Ala	Ala	Gly	Pro	Gly	Pro	Ser	Pro	Ala	Gly	Arg
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Gly	Pro	Gly	Pro	Gln	Ala										
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<210> 5405

<211> 1609

<212> DNA

<213> Homo sapiens

<400> 5405

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<210> 5406
 <211> 291
 <212> PRT
 <213> Homo sapiens

<400> 5406
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 Ala Gln Cys Leu Arg Asn Gly Gln Val Ile Glu Pro Asp Lys Asn Arg
 35 40 45
 Lys Tyr Cys Ser Ala Lys Ala Arg His Ser Trp Thr Lys Asp Arg Arg
 50 55 60
 Ala Met Arg Val Met Ser Ile Glu Arg Lys Lys Trp Met Asn Ile Arg
 65 70 75 80
 Pro Leu Pro Thr Lys Lys Gln Met Pro Leu Gln Phe Asp Leu Cys Asn
 85 90 95
 His Ile Ala Ser Gly Lys Lys Cys Gln Tyr Val Gly Asn Cys Ser Phe
 100 105 110
 Ala His Ser Pro Glu Glu Arg Glu Val Trp Thr Tyr Met Lys Glu Asn
 115 120 125
 Gly Ile Gln Asp Met Glu Gln Phe Tyr Glu Leu Trp Leu Lys Ser Gln
 130 135 140
 Lys Asn Glu Lys Ser Glu Asp Ile Ala Ser Gln Ser Asn Lys Glu Asn
 145 150 155 160
 Gly Lys Gln Ile His Met Pro Thr Asp Tyr Ala Glu Val Thr Val Asp
 165 170 175
 Phe His Cys Trp Met Cys Gly Lys Asn Cys Asn Ser Glu Lys Gln Trp
 180 185 190
 Gln Gly His Ile Ser Ser Glu Lys His Lys Glu Lys Val Phe His Thr
 195 200 205
 Glu Asp Asp Gln Tyr Cys Trp Gln His Arg Phe Pro Thr Gly Tyr Phe
 210 215 220
 Ser Ile Cys Asp Arg Tyr Met Asn Gly Thr Cys Pro Glu Gly Asn Ser
 225 230 235 240
 Cys Lys Phe Ala His Gly Asn Ala Glu Leu His Glu Trp Glu Glu Arg
 245 250 255
 Arg Asp Ala Leu Lys Met Lys Leu Asn Lys Ala Arg Lys Asp His Leu
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<210> 5407
 <211> 2010
 <212> DNA
 <213> Homo sapiens

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1680

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<210> 5408

<211> 335

<212> PRT

<213> Homo sapiens

<400> 5408

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			20					25					30		
Lys	Glu	Met	Val	Leu	Ser	Glu	Lys	Val	Ser	Gln	Leu	Met	Glu	Trp	Thr
		35					40					45			
Asn	Lys	Arg	Pro	Val	Ile	Arg	Met	Asn	Gly	Asp	Lys	Phe	Arg	Arg	Leu
	50					55					60				
Val	Lys	Ala	Pro	Pro	Arg	Asn	Tyr	Ser	Val	Ile	Val	Met	Phe	Thr	Ala
65					70					75					80
Leu	Gln	Leu	His	Arg	Gln	Cys	Val	Val	Cys	Lys	Gln	Ala	Asp	Glu	Glu
			85						90					95	
Phe	Gln	Ile	Leu	Ala	Asn	Ser	Trp	Arg	Tyr	Ser	Ser	Ala	Phe	Thr	Asn
			100					105					110		
Arg	Ile	Phe	Phe	Ala	Met	Val	Asp	Phe	Asp	Glu	Gly	Ser	Asp	Val	Phe
		115					120					125			
Gln	Met	Leu	Asn	Met	Asn	Ser	Ala	Pro	Thr	Phe	Ile	Asn	Phe	Pro	Ala
	130				135						140				
Lys	Gly	Lys	Pro	Lys	Arg	Gly	Asp	Thr	Tyr	Glu	Leu	Gln	Val	Arg	Gly
145					150					155					160
Phe	Ser	Ala	Glu	Gln	Ile	Ala	Arg	Trp	Ile	Ala	Asp	Arg	Thr	Asp	Val
			165					170						175	
Asn	Ile	Arg	Val	Ile	Arg	Pro	Pro	Asn	Tyr	Ala	Gly	Pro	Leu	Met	Leu
			180					185					190		
Gly	Leu	Leu	Leu	Ala	Val	Ile	Gly	Gly	Leu	Val	Tyr	Leu	Arg	Arg	Ser
		195					200					205			
Asn	Met	Glu	Phe	Leu	Phe	Asn	Lys	Thr	Gly	Trp	Ala	Phe	Ala	Ala	Leu
	210					215					220				
Cys	Phe	Val	Leu	Ala	Met	Thr	Ser	Gly	Gln	Met	Trp	Asn	His	Ile	Arg
225					230					235					240
Gly	Pro	Pro	Tyr	Ala	His	Lys	Asn	Pro	His	Thr	Gly	His	Val	Asn	Tyr
			245					250						255	
Ile	His	Gly	Ser	Gln	Ala	Gln	Phe	Val	Ala	Glu	Thr	His	Ile	Val	
			260				265					270			
Leu	Leu	Phe	Asn	Gly	Gly	Val	Thr	Leu	Gly	Met	Val	Leu	Leu	Cys	Glu

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<211> 2019

<212> DNA

<213> Homo sapiens

<400> 5409

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          35           40           45
Asp Leu Cys Val Leu Phe Gly Lys Gly Asn Ser Pro Leu Leu Gln Lys
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Met Ile Gly Asn Ile Phe Thr Gln Gln Pro Ser Tyr Tyr Ser Asp Leu
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Asp Glu Thr Leu Pro Thr Ile Leu Gln Val Phe Ser Asn Ile Leu Gln
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His Cys Gly Leu Gln Gly Asp Gly Ala Asn Thr Thr Pro Gln Lys Leu
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Lys Asp Ile Val Leu Tyr Leu Cys Asp Thr Cys Thr Thr Leu Trp Ala
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Phe His Ile Ile Leu Asn Gln Ile Cys Leu Leu Pro Ile Leu Glu Ser
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Tyr Tyr Glu Asp Glu Tyr Asp Asp Thr Tyr Asp Gly Asn Gln Val Gly				
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Pro Ser Gln Val Leu Arg Thr Lys Val Pro Arg Glu Gly Gln Glu Glu				
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Asp Asp Asp Asp Glu Glu Asp Asp Ala Asp Glu Glu Ala Pro Lys Pro				
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Asp His Phe Val Gln Asp Pro Ala Val Leu Arg Glu Lys Ala Glu Ala				
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Arg Arg Met Ala Phe Leu Ala Lys Lys Gly Tyr Arg His Asp Ser Ser				
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Thr Ala Val Ala Gly Ser Pro Arg Gly His Gly Gln Ser Arg Glu Thr				
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Thr Gln Glu Arg Arg Lys Lys Glu Ala Asn Lys Ala Thr Arg Ala Asn				
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<212> DNA

<213> Homo sapiens

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 Glu Met Ser Ser Thr Leu Asp Cys Leu Pro Val Leu Ala Asp Trp Glu
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<212> DNA

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<211> 528

<212> PRT

<213> Homo sapiens

<400> 5418

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 35 40 45
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 Arg His Ala Glu Asn Pro His His Pro Leu Lys Thr Ser Ser Arg Ala

4602

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 <212> DNA
 <213> Homo sapiens

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<210> 5420
 <211> 174
 <212> PRT
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840

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<210> 5422

<211> 276

<212> PRT

<213> Homo sapiens

<400> 5422

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			20					25					30		
Thr	Gln	Pro	Leu	Gly	Leu	Leu	Arg	Leu	Leu	Gln	Leu	Val	Ser	Thr	Cys
			35				40					45			
Val	Ala	Phe	Ser	Leu	Val	Ala	Ser	Val	Gly	Ala	Trp	Thr	Gly	Ser	Met
	50					55					60				
Gly	Asn	Trp	Ser	Met	Phe	Thr	Trp	Cys	Phe	Cys	Phe	Ser	Val	Thr	Leu
65				70					75					80	
Ile	Ile	Leu	Ile	Val	Glu	Leu	Cys	Gly	Leu	Gln	Ala	Arg	Phe	Pro	Leu
			85					90					95		
Ser	Trp	Arg	Asn	Phe	Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu	Phe
			100					105					110		
Cys	Leu	Ser	Ala	Ser	Ile	Ile	Tyr	Pro	Thr	Thr	Tyr	Val	Gln	Phe	Leu
			115				120				125				
Ser	His	Gly	Arg	Ser	Arg	Asp	His	Ala	Ile	Ala	Ala	Thr	Phe	Phe	Ser
	130					135					140				
Cys	Ile	Ala	Cys	Val	Ala	Tyr	Ala	Thr	Glu	Val	Ala	Trp	Thr	Arg	Ala
145					150					155				160	
Arg	Pro	Gly	Glu	Ile	Thr	Gly	Tyr	Met	Ala	Thr	Val	Pro	Gly	Leu	Leu
			165					170						175	
Lys	Val	Leu	Glu	Thr	Phe	Val	Ala	Cys	Ile	Ile	Phe	Ala	Phe	Ile	Ser
			180					185					190		
Asp	Pro	Asn	Leu	Tyr	Gln	His	Gln	Pro	Ala	Leu	Glu	Trp	Cys	Val	Ala
		195					200					205			
Val	Tyr	Ala	Ile	Cys	Phe	Ile	Leu	Ala	Ala	Ile	Ala	Ile	Leu	Leu	Asn
	210					215				220					
Leu	Gly	Glu	Cys	Thr	Asn	Val	Leu	Pro	Ile	Pro	Phe	Pro	Ser	Phe	Leu
225					230					235				240	
Ser	Gly	Leu	Ala	Leu	Cys	Leu	Ser	Ser	Ser	Met	Pro	Pro	Pro	Leu	Phe
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<211> 2427
<212> DNA
<213> Homo sapiens

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<210> 5424

<211> 570

<212> PRT

<213> Homo sapiens

<400> 5424

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		20					25				30			Gln
Lys	Tyr	Gln	Leu	Leu	Val	Tyr	His	Ala	Asp	Ser	Leu	Phe	His	Asp
		35				40				45				Lys
Glu	Tyr	Arg	Asn	Ala	Val	Ser	Lys	Tyr	Thr	Met	Ala	Leu	Gln	Gln
	50				55			60						Lys
Lys	Ala	Leu	Ser	Lys	Thr	Ser	Lys	Val	Arg	Pro	Ser	Thr	Gly	Asn
														Ser

65					70					75				80
Ala	Ser	Thr	Pro	Gln	Ser	Gln	Cys	Leu	Pro	Ser	Glu	Ile	Glu	Val
				85					90					95
Tyr	Lys	Met	Ala	Glu	Cys	Tyr	Thr	Met	Leu	Lys	Gln	Asp	Lys	Asp
			100					105					110	
Ile	Ala	Ile	Leu	Asp	Gly	Ile	Pro	Ser	Arg	Gln	Arg	Thr	Pro	Lys
		115					120					125		
Asn	Met	Met	Leu	Ala	Asn	Leu	Tyr	Lys	Lys	Ala	Gly	Gln	Glu	Arg
	130					135					140			
Ser	Val	Thr	Ser	Tyr	Lys	Glu	Val	Leu	Arg	Gln	Cys	Pro	Leu	Ala
145					150				155					160
Asp	Ala	Ile	Leu	Gly	Leu	Leu	Ser	Leu	Ser	Val	Lys	Gly	Ala	Glu
			165					170						175
Ala	Ser	Met	Thr	Met	Asn	Val	Ile	Gln	Thr	Val	Pro	Asn	Leu	Asp
		180						185					190	
Leu	Ser	Val	Trp	Ile	Lys	Ala	Tyr	Ala	Phe	Val	His	Thr	Gly	Asp
	195					200						205		Asn
Ser	Arg	Ala	Ile	Ser	Thr	Ile	Cys	Ser	Leu	Glu	Lys	Lys	Ser	Leu
	210					215					220			
Arg	Asp	Asn	Val	Asp	Leu	Gly	Ser	Leu	Ala	Asp	Leu	Tyr	Phe	Arg
225					230				235					240
Ala	Gly	Asp	Asn	Lys	Asn	Ser	Val	Leu	Lys	Phe	Glu	Gln	Ala	Gln
			245						250					255
Leu	Asp	Pro	Tyr	Leu	Ile	Lys	Gly	Met	Asp	Val	Tyr	Gly	Tyr	Leu
		260					265					270		
Ala	Arg	Glu	Gly	Arg	Leu	Glu	Asp	Val	Glu	Asn	Leu	Gly	Cys	Arg
	275					280						285		Leu
Phe	Asn	Ile	Ser	Asp	Gln	His	Ala	Glu	Pro	Trp	Val	Val	Ser	Gly
	290				295						300			Cys
His	Ser	Phe	Tyr	Ser	Lys	Arg	Tyr	Ser	Arg	Ala	Leu	Tyr	Leu	Gly
305					310					315				320
Lys	Ala	Ile	Gln	Leu	Asn	Ser	Asn	Ser	Val	Gln	Ala	Leu	Leu	Leu
			325						330					335
Gly	Ala	Ala	Leu	Arg	Asn	Met	Gly	Arg	Val	Gln	Glu	Ala	Ile	Ile
		340					345						350	His
Phe	Arg	Glu	Ala	Ile	Arg	Leu	Ala	Pro	Cys	Arg	Leu	Asp	Cys	Tyr
	355					360						365		Glu
Gly	Leu	Ile	Glu	Cys	Tyr	Leu	Ala	Ser	Asn	Ser	Ile	Arg	Glu	Ala
	370					375					380			Met
Val	Met	Ala	Asn	Asn	Val	Tyr	Lys	Thr	Leu	Gly	Ala	Asn	Ala	Gln
385				390						395				400
Leu	Thr	Leu	Leu	Ala	Thr	Val	Cys	Leu	Glu	Asp	Pro	Val	Thr	Gln
			405						410					415
Lys	Ala	Lys	Thr	Leu	Leu	Asp	Lys	Ala	Leu	Thr	Gln	Arg	Pro	Asp
		420					425						430	Tyr
Ile	Lys	Ala	Val	Val	Lys	Lys	Ala	Glu	Leu	Leu	Ser	Arg	Glu	Gln
	435					440						445		Lys
Tyr	Glu	Asp	Gly	Ile	Ala	Leu	Leu	Arg	Asn	Ala	Leu	Ala	Asn	Gln
	450					455				460				Ser
Asp	Cys	Val	Leu	His	Arg	Ile	Leu	Gly	Asp	Phe	Leu	Val	Ala	Val
465				470					475					480
Glu	Tyr	Gln	Glu	Ala	Met	Asp	Gln	Tyr	Ser	Ile	Ala	Leu	Ser	Leu
			485						490					495
Pro	Asn	Asp	Gln	Lys	Ser	Leu	Glu	Gly	Met	Gln	Lys	Met	Glu	Lys

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      515      520      525
Gly Ser Gly Glu Glu Gly Asp Leu Glu Gly Ser Asp Ser Glu Ala Ala
      530      535      540
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Ala Pro Trp Pro Gln Trp Pro Ala Leu Leu
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<210> 5425
 <211> 639
 <212> DNA
 <213> Homo sapiens

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<210> 5426
 <211> 98
 <212> PRT
 <213> Homo sapiens

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Pro Ser Cys Ala Pro Ala Leu Leu Gly Ser Gly Cys Gly Ser Gly Glu
20      25      30
Ser Cys Asp Arg Gly Cys Leu Ala Ala Ile Leu Ala Ser Thr Ser Ala
35      40      45
Thr Gln Ala Arg Met Cys Pro Val Leu Arg Cys Cys Ser Glu Phe Ile
50      55      60
Glu Ala Xaa Gly Val Val Asp Gly Ile Tyr Arg Leu Ser Gly Val Ser

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65 70 75 80
Ser Asn Ile Gln Arg Leu Arg His Glu Phe Asp Ser Glu Arg Ile Pro
 85 90 95
Glu Leu

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<210> 5427
<211> 366
<212> DNA
<213> Homo sapiens
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366

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<211> 101
<212> PRT
<213> Homo sapiens
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<400> 5428
Met Phe His Ser Leu Asn Val Ser Ser Pro Leu Phe His Lys Cys Cys
 1                    5                      10          15
Ser Cys Cys Gln Tyr Gln Phe Ile Tyr Phe Ser Asn Pro Asn Ile Pro
 20                      25                      30
Phe Gly His Ser Val Glu Asp Pro Ile Pro Ala Arg Met His Val Phe
 35                      40                      45
Ser Glu Tyr Leu Tyr Pro Phe Cys Pro Leu Met Tyr Pro Gln His Leu
 50                      55                      60
Glu Glu His Leu Ala Cys Ser Arg Tyr Ser Thr Arg Ile Phe Asp Leu
 65                      70                      75          80
Phe Val Gly Leu Phe Met Thr Glu Ser Cys Ser Val Ala Gln Thr Gly
 85                      90                      95
Val Gln Tyr Ser Asp
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<210> 5429
<211> 612
<212> DNA
<213> Homo sapiens
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<400> 5429

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 120
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 180
 gatttgaatt gcttgtggct ccgcccacag cccattttcc tctggaagct gagaccccg
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 300
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 420
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<210> 5430

<211> 94

<212> PRT

<213> Homo sapiens

<400> 5430

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Val	Lys	Gln	Glu	Arg	Gly	Glu	Gly	Pro	Arg	Ala	Gly	Glu	Lys	Gly	Ser
		20					25					30			
His	Glu	Glu	Glu	Val	Arg	Val	Pro	Ala	Leu	Ser	Trp	Gly	Arg	Pro	Arg
	35					40					45				
Ala	Pro	Ala	Pro	Ala	Ser	Lys	Pro	Arg	Pro	Arg	Leu	Asp	Leu	Asn	Cys
	50					55					60				
Leu	Trp	Leu	Arg	Pro	Gln	Pro	Ile	Phe	Leu	Trp	Lys	Leu	Arg	Pro	Arg
65				70				75					80		
Pro	Val	Pro	Ala	Ala	Thr	Pro	Leu	Thr	Gly	Pro	Leu	Pro	Leu		
				85				90							

<210> 5431

<211> 3005

<212> DNA

<213> Homo sapiens

<400> 5431

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 gccattgtct gggcacccaa cctgctacgg tccatggagc tggagtcagt gggaatgggt
 180

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240
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480
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 2040
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 2880
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<210> 5432

<211> 863

<212> PRT

<213> Homo sapiens

<400> 5432

Xaa His Asp Val Ile Gln Gln Leu Pro Pro Pro His Tyr Arg Thr Leu
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 20 25 30
 Thr Ser Met His Ala Arg Asn Leu Ala Ile Val Trp Ala Pro Asn Leu

35 40 45
 Leu Arg Ser Met Glu Leu Glu Ser Val Gly Met Gly Gly Ala Ala Ala
 50 55 60
 Phe Arg Glu Val Arg Val Gln Ser Val Val Val Glu Phe Leu Leu Thr
 65 70 75 80
 His Val Asp Val Leu Phe Ser Asp Thr Phe Thr Ser Ala Gly Leu Asp
 85 90 95
 Pro Ala Gly Arg Cys Leu Leu Pro Arg Pro Lys Ser Leu Ala Gly Ser
 100 105 110
 Cys Pro Ser Thr Arg Leu Leu Thr Leu Glu Glu Ala Gln Ala Arg Thr
 115 120 125
 Gln Gly Arg Leu Gly Thr Pro Thr Glu Pro Thr Thr Pro Lys Ala Pro
 130 135 140
 Ala Ser Pro Ala Glu Arg Lys Gly Glu Arg Gly Glu Lys Gln Arg
 145 150 155 160
 Lys Pro Gly Gly Ser Ser Trp Lys Thr Phe Phe Ala Leu Gly Arg Gly
 165 170 175
 Pro Ser Val Pro Arg Lys Lys Pro Leu Pro Trp Leu Gly Gly Thr Arg
 180 185 190
 Ala Pro Pro Gln Pro Ser Gly Ser Arg Pro Asp Thr Val Thr Leu Arg
 195 200 205
 Ser Ala Lys Ser Glu Glu Ser Leu Ser Ser Gln Ala Ser Gly Ala Gly
 210 215 220
 Leu Gln Arg Leu His Arg Leu Arg Arg Pro His Ser Ser Ser Asp Ala
 225 230 235 240
 Phe Pro Val Gly Pro Ala Pro Ala Gly Ser Cys Glu Ser Leu Ser Ser
 245 250 255
 Ser Ser Ser Ser Glu Ser Ser Ser Ser Glu Ser Ser Ser Ser Ser
 260 265 270
 Glu Ser Ser Ala Ala Gly Leu Gly Ala Leu Ser Gly Ser Pro Ser His
 275 280 285
 Arg Thr Ser Ala Trp Leu Asp Asp Gly Asp Glu Leu Asp Phe Ser Pro
 290 295 300
 Pro Arg Cys Leu Glu Gly Leu Arg Gly Leu Asp Phe Asp Pro Leu Thr
 305 310 315 320
 Phe Arg Cys Ser Ser Pro Thr Pro Gly Asp Pro Ala Pro Pro Ala Ser
 325 330 335
 Pro Ala Pro Pro Ala Pro Ala Ser Ala Phe Pro Pro Arg Val Thr Pro
 340 345 350
 Gln Ala Ile Ser Pro Arg Gly Pro Thr Ser Pro Ala Ser Pro Ala Ala
 355 360 365
 Leu Asp Ile Ser Glu Pro Leu Ala Val Ser Val Pro Pro Ala Val Leu
 370 375 380
 Glu Leu Leu Gly Ala Gly Ala Pro Ala Ser Ala Thr Pro Thr Pro
 385 390 395 400
 Ala Leu Ser Pro Gly Arg Ser Leu Arg Pro His Leu Ile Pro Leu Leu
 405 410 415
 Leu Arg Gly Ala Glu Ala Pro Leu Thr Asp Ala Cys Gln Gln Glu Met
 420 425 430
 Cys Ser Lys Leu Arg Gly Ala Gln Gly Pro Leu Gly Pro Asp Met Glu
 435 440 445
 Ser Pro Leu Pro Pro Pro Pro Leu Ser Leu Leu Arg Pro Gly Gly Ala
 450 455 460
 Pro Pro Pro Pro Pro Lys Asn Pro Ala Arg Leu Met Ala Leu Ala Leu

465					470					475				480	
Ala	Glu	Arg	Ala	Gln	Gln	Val	Ala	Glu	Gln	Gln	Ser	Gln	Gln	Glu	Cys
				485					490					495	
Gly	Gly	Thr	Pro	Pro	Ala	Ser	Gln	Ser	Pro	Phe	His	Arg	Ser	Leu	Ser
			500					505					510		
Leu	Glu	Val	Gly	Gly	Glu	Pro	Leu	Gly	Thr	Ser	Gly	Ser	Gly	Pro	Pro
		515					520					525			
Pro	Asn	Ser	Leu	Ala	His	Pro	Gly	Ala	Trp	Val	Pro	Gly	Pro	Pro	Pro
	530					535					540				
Tyr	Leu	Pro	Arg	Gln	Gln	Ser	Asp	Gly	Ser	Leu	Leu	Arg	Ser	Gln	Arg
545				550						555					560
Pro	Met	Gly	Thr	Ser	Arg	Arg	Gly	Leu	Arg	Gly	Pro	Ala	Gln	Val	Ser
			565						570					575	
Ala	Gln	Leu	Arg	Ala	Gly	Gly	Gly	Gly	Arg	Asp	Ala	Pro	Glu	Ala	Ala
		580						585					590		
Ala	Gln	Ser	Pro	Cys	Ser	Val	Pro	Ser	Gln	Val	Pro	Thr	Pro	Gly	Phe
		595					600					605			
Phe	Ser	Pro	Ala	Pro	Arg	Glu	Cys	Leu	Pro	Pro	Phe	Leu	Gly	Val	Pro
	610				615						620				
Lys	Pro	Gly	Leu	Tyr	Pro	Leu	Gly	Pro	Pro	Ser	Phe	Gln	Pro	Ser	Ser
625				630						635					640
Pro	Ala	Pro	Val	Trp	Arg	Ser	Ser	Leu	Gly	Pro	Pro	Ala	Pro	Leu	Asp
			645						650					655	
Arg	Gly	Glu	Asn	Leu	Tyr	Tyr	Glu	Ile	Gly	Ala	Ser	Glu	Gly	Ser	Pro
		660						665					670		
Tyr	Ser	Gly	Pro	Thr	Arg	Ser	Trp	Ser	Pro	Phe	Arg	Ser	Met	Pro	Pro
	675						680					685			
Asp	Arg	Leu	Asn	Ala	Ser	Tyr	Gly	Met	Leu	Gly	Gln	Ser	Pro	Pro	Leu
	690				695						700				
His	Arg	Ser	Pro	Asp	Phe	Leu	Leu	Ser	Tyr	Pro	Pro	Ala	Pro	Ser	Cys
705				710						715					720
Phe	Pro	Pro	Asp	His	Leu	Gly	Tyr	Ser	Ala	Pro	Gln	His	Pro	Ala	Arg
			725						730					735	
Arg	Pro	Thr	Pro	Pro	Glu	Pro	Leu	Tyr	Val	Asn	Leu	Ala	Leu	Gly	Pro
		740						745					750		
Arg	Gly	Pro	Ser	Pro	Ala	Ser	Ser	Ser	Ser	Ser	Pro	Pro	Ala	His	
	755					760					765				
Pro	Arg	Ser	Arg	Ser	Asp	Pro	Gly	Pro	Pro	Val	Pro	Arg	Leu	Pro	Gln
	770				775					780					
Lys	Gln	Arg	Ala	Pro	Trp	Gly	Pro	Arg	Thr	Pro	His	Arg	Val	Pro	Gly
785				790						795					800
Pro	Trp	Gly	Pro	Pro	Glu	Pro	Leu	Leu	Leu	Tyr	Arg	Ala	Ala	Pro	Pro
			805						810					815	
Ala	Tyr	Gly	Arg	Gly	Gly	Glu	Leu	His	Arg	Gly	Ser	Leu	Tyr	Arg	Asn
		820						825					830		
Gly	Gly	Gln	Arg	Gly	Glu	Gly	Ala	Gly	Pro	Pro	Pro	Pro	Tyr	Pro	Thr
	835						840					845			
Pro	Ser	Trp	Ser	Leu	His	Ser	Glu	Gly	Gln	Thr	Arg	Ser	Tyr	Cys	
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<210> 5433

<211> 385

<212> DNA

<213> Homo sapiens

<400> 5433
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 120
 ctgggtataa gaagctcttc tgggtctccag agttctcgga gtaacccttc catccaagcc
 180
 acgctcaata agactgtgct ttcctcttcc ttaaataacc acccacagac atctgttccc
 240
 aacgcattctg ctcttcaccc ttcgctccgt ctgttttccc ttagcaaccc atctctttcc
 300
 accacaaacc tgagcggccc gtctcggcgt cggcagcctc ccgtcagccc tctcacgctt
 360
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<210> 5434
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 5434
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 Thr Thr Asp His His Phe Gly Ser Met Ser Val Gly Asn Ser Val Asn
 20 25 30
 Asn Ile Pro Ala Ala Met Thr His Leu Gly Ile Arg Ser Ser Ser Gly
 35 40 45
 Leu Gln Ser Ser Arg Ser Asn Pro Ser Ile Gln Ala Thr Leu Asn Lys
 50 55 60
 Thr Val Leu Ser Ser Ser Leu Asn Asn His Pro Gln Thr Ser Val Pro
 65 70 75 80
 Asn Ala Ser Ala Leu His Pro Ser Leu Arg Leu Phe Ser Leu Ser Asn
 85 90 95
 Pro Ser Leu Ser Thr Thr Asn Leu Ser Gly Pro Ser Arg Arg Arg Gln
 100 105 110
 Pro Pro Val Ser Pro Leu Thr Leu Ser Pro Gly Pro Glu Ala His Gln
 115 120 125

<210> 5435
 <211> 617
 <212> DNA
 <213> Homo sapiens

<400> 5435
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 180
 atagtactat aatactgcag aaagggatct tgcgtttcag aaatgtcact catccagttt
 240

tcttccccctt tctctaacc cctctccctc ccaggctcat ggtttctgtt gcaatcctct
 300
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 360
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 420
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 480
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 540
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 600
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 617

<210> 5436

<211> 119

<212> PRT

<213> Homo sapiens

<400> 5436

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			20					25					30		
Gly	Thr	Ile	Arg	Ala	Asn	Leu	Tyr	Phe	Lys	Ile	Leu	Gln	Pro	Lys	Met
		35					40				45				
Lys	Asn	Asn	His	Ile	Arg	Ser	Cys	Arg	Ala	Val	Leu	His	Arg	Ser	Asp
	50					55				60					
Leu	Leu	Val	Arg	Lys	Leu	Leu	Ala	Leu	Cys	Lys	Glu	Lys	Glu	Asp	Cys
65					70				75					80	
Asn	Arg	Asn	His	Glu	Pro	Gly	Arg	Glu	Met	Gly	Leu	Glu	Lys	Gly	Glu
			85					90					95		
Glu	Asn	Trp	Met	Ser	Asp	Ile	Ser	Glu	Thr	Gln	Asp	Pro	Phe	Leu	Gln
			100					105					110		
Tyr	Tyr	Ser	Thr	Ile	Val	Met									
			115												

<210> 5437

<211> 1422

<212> DNA

<213> Homo sapiens

<400> 5437

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 120
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 180
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 240
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 300

gtggtgtcca acgtccagga gtatcgtgag tttgtgccct ggtgtaagaa gtctctgggtg
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 420
 gaacgttaca cctctgcagt ttccatgggtc aaacctcaca tggtaaggc tgtttgtact
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 660
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 720
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 1020
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 1080
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 1200
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 1260
 ttaccaccag tgctgaggag aaaagtactg aacggaaacg gagttgtctt tgtactcttg
 1320
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 1380
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 1422

<210> 5438

<211> 245

<212> PRT

<213> Homo sapiens

<400> 5438

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Gly	Ser	Asn	His	Ala	Leu	Gly	Ala	Asn	Val	Glu	Leu	Trp	Ile	Met
		20					25				30			
Leu	Gln	Val	Val	Arg	Glu	Gly	Lys	Phe	Ser	Gly	Phe	Leu	Thr	Ser
		35					40				45			
Ser	Leu	Leu	Leu	Pro	Arg	Ala	Ala	Gln	Ile	Leu	Ala	Ala	Glu	Ala
		50					55				60			
Leu	Pro	Ser	Ser	Arg	Ser	Phe	Met	Gly	Phe	Ala	Ala	Pro	Phe	Thr
														Asn

65					70					75				80	
Lys	Arg	Lys	Ala	Tyr	Ser	Glu	Arg	Arg	Ile	Met	Gly	Tyr	Ser	Met	Gln
				85					90					95	
Glu	Met	Tyr	Glu	Val	Val	Ser	Asn	Val	Gln	Glu	Tyr	Arg	Glu	Phe	Val
			100					105					110		
Pro	Trp	Cys	Lys	Lys	Ser	Leu	Val	Val	Ser	Ser	Arg	Lys	Gly	His	Leu
		115					120					125			
Lys	Ala	Gln	Leu	Glu	Val	Gly	Phe	Pro	Pro	Val	Met	Glu	Arg	Tyr	Thr
	130					135					140				
Ser	Ala	Val	Ser	Met	Val	Lys	Pro	His	Met	Val	Lys	Ala	Val	Cys	Thr
145					150					155				160	
Asp	Gly	Lys	Leu	Phe	Asn	His	Leu	Glu	Thr	Ile	Trp	Arg	Phe	Ser	Pro
			165					170						175	
Gly	Ile	Pro	Ala	Tyr	Pro	Arg	Thr	Cys	Thr	Val	Asp	Phe	Ser	Ile	Ser
		180						185					190		
Phe	Glu	Phe	Arg	Ser	Leu	Leu	His	Ser	Gln	Leu	Ala	Thr	Met	Phe	Phe
		195					200					205			
Asp	Glu	Val	Val	Lys	Gln	Asn	Val	Ala	Ala	Phe	Glu	Arg	Arg	Ala	Ala
	210					215					220				
Thr	Lys	Phe	Gly	Pro	Glu	Thr	Ala	Ile	Pro	Arg	Glu	Leu	Met	Phe	His
225					230					235				240	
Glu	Val	His	Gln	Thr											
				245											

<210> 5439

<211> 4234

<212> DNA

<213> Homo sapiens

<400> 5439

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 120
 atcaaagtgt tgggaaaatg gaaggaagtg aagattgacc caaatatgtt tgcagatgga
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<210> 5440

<211> 461

<212> PRT

<213> Homo sapiens

<400> 5440

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 35 40 45
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 50 55 60
 Arg Gln Leu Arg Cys Leu Val Val Asp Glu Ala Asp Arg Met Val Glu
 65 70 75 80
 Lys Gly His Phe Ala Glu Leu Ser Gln Leu Leu Glu Met Leu Asn Asp
 85 90 95
 Ser Gln Tyr Asn Pro Lys Arg Gln Thr Leu Val Phe Ser Ala Thr Leu
 100 105 110
 Thr Leu Val His Gln Ala Pro Ala Arg Ile Leu His Lys Lys His Thr
 115 120 125
 Lys Lys Met Asp Lys Thr Ala Lys Leu Asp Leu Leu Met Gln Lys Ile
 130 135 140
 Gly Met Arg Gly Lys Pro Lys Val Ile Asp Leu Thr Arg Asn Glu Ala
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 Lys Asp Phe Tyr Leu Tyr Tyr Phe Leu Met Gln Tyr Pro Gly Arg Ser
 180 185 190
 Leu Val Phe Ala Asn Ser Ile Ser Cys Ile Lys Arg Leu Ser Gly Leu
 195 200 205
 Leu Lys Val Leu Asp Ile Met Pro Leu Thr Leu His Ala Cys Met His
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 Gln Lys Gln Arg Leu Arg Asn Leu Glu Gln Phe Ala Arg Leu Glu Asp
 225 230 235 240
 Cys Val Leu Leu Ala Thr Asp Val Ala Ala Arg Gly Leu Asp Ile Pro
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 Lys Val Gln His Val Ile His Tyr Gln Val Pro Arg Thr Ser Glu Ile
 260 265 270
 Tyr Val His Arg Ser Gly Arg Thr Ala Arg Ala Thr Asn Glu Gly Leu
 275 280 285
 Ser Leu Met Leu Ile Gly Pro Glu Asp Val Ile Asn Phe Lys Lys Ile

290 295 300
 Tyr Lys Thr Leu Lys Lys Asp Glu Asp Ile Pro Leu Phe Pro Val Gln
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 325 330 335
 Ile Glu Lys Ser Glu Tyr Arg Asn Phe Gln Ala Cys Leu His Asn Ser
 340 345 350
 Trp Ile Glu Gln Ala Ala Ala Ala Leu Glu Ile Glu Leu Glu Glu Asp
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 Met Tyr Lys Gly Gly Lys Ala Asp Gln Gln Glu Glu Arg Arg Arg Gln
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 Lys Gln Met Lys Val Leu Lys Lys Glu Leu Arg His Leu Leu Ser Gln
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 Pro Leu Phe Thr Glu Ser Gln Lys Thr Lys Tyr Pro Thr Gln Ser Gly
 405 410 415
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<210> 5441

<211> 1635

<212> DNA

<213> Homo sapiens

<400> 5441

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<210> 5442

<211> 250

<212> PRT

<213> Homo sapiens

<400> 5442

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Lys	Asn	Lys	Val	Val	Gly	Trp	Arg	Ser	Gly	Val	Glu	Lys	Asp	Leu	Asp
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Glu	Val	Leu	Gln	Thr	His	Ser	Val	Phe	Val	Asn	Val	Ser	Lys	Gly	Gln
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Val	Ala	Lys	Lys	Glu	Asp	Leu	Ile	Ser	Ala	Phe	Gly	Thr	Asp	Asp	Gln
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Thr	Glu	Ile	Cys	Lys	Gln	Ile	Leu	Thr	Lys	Gly	Glu	Val	Gln	Val	Ser
			85					90					95		
Asp	Lys	Glu	Arg	His	Thr	Gln	Leu	Glu	Gln	Met	Phe	Arg	Asp	Ile	Ala
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Ile Leu Pro Val Asn Glu Gly Lys Lys Leu Lys Glu Lys Leu Lys Pro		175
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Leu Ile Lys Val Ile Glu Ser Glu Asp Tyr Gly Gln Gln Leu Glu Ile		190
	195	200
Val Cys Leu Ile Asp Pro Gly Cys Phe Arg Glu Ile Asp Glu Leu Ile		205
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<210> 5443
 <211> 2021
 <212> DNA
 <213> Homo sapiens

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 2021

<210> 5444

<211> 438

<212> PRT

<213> Homo sapiens

<400> 5444

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			20						25					30	
Lys	Ile	Arg	Leu	Arg	Cys	Gln	Lys	Gly	Ile	Pro	Pro	Ser	Leu	Arg	Gly
			35						40					45	
Arg	Ala	Trp	Gln	Tyr	Leu	Ser	Gly	Gly	Lys	Val	Lys	Leu	Gln	Gln	Asn
			50						55					60	
Pro	Gly	Lys	Phe	Asp	Glu	Leu	Asp	Met	Ser	Pro	Gly	Asp	Pro	Lys	Trp
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Leu	Lys	Ala	Tyr	Thr	Leu	Tyr	Arg	Pro	Glu	Glu	Gly	Tyr	Cys	Gln	Ala		
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Gln	Glu	Ala	Phe	Leu	Val	Gln	Glu	Val	Val	Glu	Leu	Pro	Val	Thr	Glu		
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Thr	Arg	Gly	Glu	Leu	Gln	Cys	Arg	Ser	Pro	Pro	Arg	Leu	His	Gly	Ala		
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Lys	Ala	Ile	Leu	Asp	Ala	Glu	Pro	Gly	Pro	Arg	Pro	Ala	Leu	Gln	Pro		
			325					330					335				
Ser	Pro	Ser	Ile	Arg	Leu	Pro	Leu	Asp	Ala	Pro	Leu	Pro	Gly	Ser	Lys		
			340					345					350				
Ala	Lys	Pro	Lys	Pro	Pro	Lys	Gln	Ala	Gln	Lys	Glu	Gln	Arg	Lys	Gln		
		355					360					365					
Met	Lys	Gly	Arg	Gly	Gln	Leu	Glu	Lys	Pro	Pro	Ala	Pro	Asn	Gln	Ala		
		370				375					380						
Met	Val	Val	Ala	Ala	Ala	Gly	Asp	Ala	Cys	Pro	Pro	Gln	His	Val	Pro		
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<211> 1187

<212> DNA

<213> Homo sapiens

<400> 5445

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 660
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 780
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 900
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 960
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 1020
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 1080
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 1187

<210> 5446

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5446

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 20 25 30
 Arg Lys Thr Gly Trp Arg Phe Leu Arg Arg Ser Thr His Ser Arg His
 35 40 45
 Gly Thr Gln Trp Phe His Pro Gln Val Cys Ser Asn Arg His His Ser
 50 55 60
 Pro Arg Pro His Ala Asp Ser Asp Thr Arg Ala His Ser Pro Arg Ser

65		70		75		80									
His	Ala	Asp	Ser	Asp	Met	Arg	Ala	His	Ser	Leu	Ser	His	Asp	Ser	Gln
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Thr	Val	Glu	Thr	Arg	Gln	Val	Gly	Leu	Gly	Cys					
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<210> 5447

<211> 1444

<212> DNA

<213> Homo sapiens

<400> 5447

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gatgatctca tagttgtact ttgcagtaag aagacttttc agatcaccaa acaaggagat
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240
aagaaaaaga agactattgt gactgatgtt ttccaggggt ccatgaggat cttcactaaa
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360
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720
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840
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900
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1260

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 1440
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 1444

<210> 5448
 <211> 189
 <212> PRT
 <213> Homo sapiens

<400> 5448
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 Ala Leu His Ser Ala Leu Gly Gly Thr Lys Lys Lys Lys Lys Thr Ile
 35 40 45
 Val Thr Asp Val Phe Gln Gly Ser Met Arg Ile Phe Thr Lys Lys Leu
 50 55 60
 Pro His Pro Asp Leu Pro Ala Glu Glu Lys Glu Gln Leu Leu His Asn
 65 70 75 80
 Asp Glu Tyr Gln Glu Thr Met Val Glu Ser Thr Phe Met Tyr Leu Thr
 85 90 95
 Leu Asp Leu Pro Thr Ala Pro Leu Tyr Lys Asp Glu Lys Glu Gln Leu
 100 105 110
 Ile Ile Pro Gln Val Pro Leu Phe Asn Ile Leu Ala Lys Phe Asn Gly
 115 120 125
 Ile Thr Glu Lys Glu Tyr Lys Thr Tyr Lys Glu Asn Phe Leu Lys Arg
 130 135 140
 Phe Gln Leu Thr Lys Leu Pro Pro Tyr Leu Ile Phe Cys Ile Lys Arg
 145 150 155 160
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 165 170 175
 Phe Pro Tyr Tyr Lys Cys Gly Ser Glu Arg Ile Leu Val
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<210> 5449
 <211> 1359
 <212> DNA
 <213> Homo sapiens

<400> 5449
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 180
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 240

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 720
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 1080
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 1200
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 1320
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 1359

<210> 5450

<211> 293

<212> PRT

<213> Homo sapiens

<400> 5450

Ser	Pro	Glu	Glu	Asp	Gln	Arg	Thr	Tyr	Val	Phe	Arg	Ala	Gln	Ser	Ala
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Glu	Met	Lys	Glu	Arg	Gly	Gly	Asn	Gln	Thr	Ser	Gly	Ile	Asp	Phe	Phe
			20					25					30		
Ile	Thr	Gln	Glu	Arg	Ile	Val	Phe	Leu	Asp	Thr	Gln	Pro	Ile	Leu	Ser
		35					40					45			
Pro	Ser	Ile	Leu	Asp	His	Leu	Ile	Asn	Asn	Asp	Arg	Lys	Leu	Pro	Pro
	50					55					60				
Glu	Tyr	Asn	Leu	Pro	His	Thr	Tyr	Val	Glu	Met	Gln	Ser	Leu	Gln	Ile

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<210> 5451
<211> 1184
<212> DNA
<213> Homo sapiens
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120
acagatgtga gccatcatgc ccggctaatt tttttgtatt ttagtagaga cagggtttca
180
ccgtgttagc caggatggtc ttgatctcct gaccttgtga tccaccagcc tcagcctccc
240
aaagtgctgg gattacaggc gtgagccact gtgcccggcc aagaattttt ttatcgataa
300
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360
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420
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540

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 660
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 720
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 780
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 1020
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 1184

<210> 5452

<211> 206

<212> PRT

<213> Homo sapiens

<400> 5452

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 20 25 30
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 35 40 45
 Leu Ser Pro Ala Leu Ser Gln Thr Thr Gln Lys Ser Gly His Leu Trp
 50 55 60
 Ala Pro Gly Met Val Thr Glu Glu Lys His Ala Val Pro Val Ser Pro
 65 70 75 80
 Gly Phe Cys Gln Lys Ile Glu Gln Val Gln Leu Thr His Cys Tyr Cys
 85 90 95
 Arg Ser Leu Lys Leu Pro Gly Leu Val Leu Asp Pro Ser Arg Asn His
 100 105 110
 Gln Val Arg His Leu Glu Pro Pro Gly Glu Gly Pro Pro Ser Arg Ala
 115 120 125
 Leu Lys Glu Leu His Glu Ile Arg Asn Cys Leu Met Lys Cys Ile Ser
 130 135 140
 Leu Tyr Leu Glu Asp Glu Ala Gln Thr Pro Thr Pro Leu Ser Pro Pro
 145 150 155 160
 Gly Leu Gly Met Ser Pro Ala Ala Arg Pro Arg Ser Phe Pro Gly Gly
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 Leu Gly Glu Val Gly Ala Gly Thr Ile Ser Val Pro Ser Thr Leu Thr
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195 200 205

<210> 5453
<211> 1974
<212> DNA
<213> Homo sapiens

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 1860
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 1920
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 1974

<210> 5454

<211> 320

<212> PRT

<213> Homo sapiens

<400> 5454

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Val	Tyr	Arg	Ser	Arg	Asp	Phe	Leu	Val	Val	Asn	Lys	His	Trp	Asp	Val
			20					25					30		
Arg	Ile	Asp	Ser	Lys	Ala	Trp	Arg	Glu	Thr	Leu	Thr	Leu	Gln	Lys	Gln
		35				40					45				
Leu	Arg	Tyr	Arg	Phe	Pro	Glu	Leu	Ala	Asp	Pro	Asp	Thr	Cys	Tyr	Gly
	50					55				60					
Phe	Arg	Phe	Cys	His	Gln	Leu	Asp	Phe	Ser	Thr	Ser	Gly	Ala	Leu	Cys
65				70					75					80	
Val	Ala	Leu	Asn	Lys	Ala	Ala	Ala	Gly	Ser	Ala	Tyr	Arg	Cys	Phe	Lys
			85					90					95		
Glu	Arg	Arg	Val	Thr	Lys	Ala	Tyr	Leu	Ala	Leu	Leu	Arg	Gly	His	Ile
			100					105					110		
Gln	Glu	Ser	Arg	Val	Thr	Ile	Ser	His	Ala	Ile	Gly	Arg	Asn	Ser	Thr
		115					120					125			
Glu	Gly	Arg	Ala	His	Thr	Met	Cys	Ile	Glu	Gly	Ser	Gln	Gly	Val	Ala
	130					135					140				
Gly	Cys	Glu	Asn	Pro	Lys	Pro	Ser	Leu	Thr	Asp	Leu	Val	Val	Leu	Glu
145				150					155					160	
His	Gly	Leu	Tyr	Ala	Gly	Asp	Pro	Val	Ser	Lys	Val	Leu	Leu	Lys	Pro
			165					170					175		
Leu	Thr	Gly	Arg	Thr	His	Gln	Leu	Arg	Val	His	Cys	Ser	Ala	Leu	Gly
		180						185					190		
His	Pro	Val	Val	Gly	Asp	Leu	Thr	Tyr	Gly	Glu	Val	Ser	Gly	Arg	Glu
		195				200						205			
Asp	Arg	Pro	Phe	Arg	Met	Met	Leu	His	Ala	Phe	Tyr	Leu	Arg	Ile	Pro

210	215	220
Thr Asp Thr Glu Cys Val Glu Val Cys Thr Pro Asp Pro Phe Leu Pro		
225	230	235
Ser Leu Asp Ala Cys Trp Ser Pro His Thr Leu Leu Gln Ser Leu Asp		240
	245	250
Gln Leu Val Gln Ala Leu Arg Ala Thr Pro Asp Pro Asp Pro Glu Asp		255
	260	265
Arg Gly Pro Arg Pro Gly Ser Pro Ser Ala Leu Leu Pro Gly Pro Gly		270
	275	280
Arg Pro Pro Pro Pro Pro Thr Lys Pro Pro Glu Thr Glu Ala Gln Arg		285
	290	295
Gly Pro Cys Leu Gln Trp Leu Ser Glu Trp Thr Leu Glu Pro Asp Ser		300
305	310	315
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<210> 5455

<211> 975

<212> DNA

<213> Homo sapiens

<400> 5455

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180
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240
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840
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960
gccctcgccg cggcg
975

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<210> 5456
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 5456
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 20 25 30
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 35 40 45
 His Cys Pro Leu Ala Val Arg Leu Ala Cys Pro Ala Val Pro Thr Thr
 50 55 60
 Val Val Lys Gln Arg Leu Gln Met Tyr Asn Ser Gln His Arg Ser Ala
 65 70 75 80
 Ile Ser Cys Ile Arg Thr Val Trp Arg Thr Glu Gly Leu Gly Ala Phe
 85 90 95
 Tyr Arg Ser Tyr Thr Thr Gln Leu Thr Met Asn Ile Pro Phe Gln Ser
 100 105 110
 Ile His Phe Ile Thr Tyr Glu Phe Leu Gln Glu Gln Val Asn Pro His
 115 120 125
 Arg Thr Tyr Asn Pro Gln Ser His Ile Ile Ser Gly Gly Leu Ala Gly
 130 135 140
 Ala Leu Ala Ala Ala
 145

<210> 5457
 <211> 448
 <212> DNA
 <213> Homo sapiens

<400> 5457
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<210> 5458
 <211> 81
 <212> PRT

<213> Homo sapiens

<400> 5458

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Asp Ser Arg Asp Gly Gly Gly Gly Lys Asp Ala Thr Gly Ser Glu Asp
      20           25           30
Tyr Glu Asn Leu Pro Thr Ser Ala Ser Val Ser Thr His Met Thr Ala
      35           40           45
Gly Ala Met Ala Gly Ile Leu Glu His Ser Val Met Tyr Pro Val Asp
      50           55           60
Ser Val Lys Val Met Trp Thr Val Glu Leu Cys Ala Gly His Phe Gln
65           70           75           80
Pro

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<210> 5459

<211> 1468

<212> DNA

<213> Homo sapiens

<400> 5459

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120
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720
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780
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840
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960

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 1380
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<210> 5460

<211> 155

<212> PRT

<213> Homo sapiens

<400> 5460

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			20					25					30		
Ser	Glu	Asp	Tyr	Glu	Asn	Leu	Pro	Thr	Ser	Ala	Ser	Val	Ser	Thr	His
			35				40					45			
Met	Thr	Ala	Gly	Ala	Met	Ala	Gly	Ile	Leu	Glu	His	Ser	Val	Met	Tyr
			50				55				60				
Pro	Val	Asp	Ser	Val	Lys	Thr	Arg	Met	Gln	Ser	Leu	Ser	Pro	Asp	Pro
65					70				75					80	
Lys	Ala	Gln	Tyr	Thr	Ser	Ile	Tyr	Gly	Ala	Leu	Lys	Lys	Ile	Met	Gln
			85					90					95		
Thr	Glu	Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met
			100					105					110		
Gly	Ala	Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met
			115				120					125			
Lys	Arg	Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu
			130				135					140			
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<210> 5461

<211> 1725

<212> DNA

<213> Homo sapiens

<400> 5461

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180
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240
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300
aaggctctat ccctgaagag gatgctggga aattatataa cacctgtgct gtgtttgggc
360
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420
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600
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720
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780
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960
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1560
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1725

<210> 5462

<211> 159

<212> PRT

<213> Homo sapiens

<400> 5462

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Phe	His	Leu	Cys	Ile	Phe	Cys	Leu	Glu	Thr	Ala	Tyr	Cys	Arg	Val	Gly
			20					25					30		
Leu	Gly	Ile	Cys	Tyr	Asp	Met	Arg	Phe	Ala	Glu	Leu	Ala	Gln	Ile	Tyr
		35					40					45			
Ala	Gln	Arg	Gly	Cys	Gln	Leu	Val	Tyr	Pro	Gly	Ala	Phe	Asn	Leu	
	50					55				60					
Thr	Thr	Gly	Pro	Ala	His	Trp	Glu	Leu	Leu	Gln	Arg	Ser	Arg	Ala	Val
65					70					75				80	
Asp	Asn	Gln	Val	Tyr	Val	Ala	Thr	Ala	Ser	Pro	Ala	Arg	Asp	Asp	Lys
			85						90				95		
Ala	Ser	Tyr	Val	Ala	Trp	Gly	His	Ser	Thr	Val	Val	Asn	Pro	Trp	Gly
			100					105				110			
Glu	Val	Leu	Ala	Lys	Ala	Gly	Thr	Glu	Glu	Ala	Ile	Val	Tyr	Ser	Asp
		115					120				125				
Ile	Asp	Leu	Lys	Lys	Leu	Ala	Glu	Ile	Arg	Gln	Gln	Ile	Pro	Val	Phe
	130					135					140				
Arg	Gln	Lys	Arg	Ser	Asp	Leu	Tyr	Ala	Val	Glu	Met	Lys	Lys	Pro	
145					150					155					

<210> 5463

<211> 792

<212> DNA

<213> Homo sapiens

<400> 5463

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180
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240
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300
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360
agctggtagt acattttgct tcttagaaag ctaagtcctg gggtccgtct gatttttaggt
420
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480
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540

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 600
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 660
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 720
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 780
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 792

<210> 5464

<211> 111

<212> PRT

<213> Homo sapiens

<400> 5464

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Leu	His	Asp	Ala	Val	Met	Asn	Pro	Ala	Glu	Val	Val	Lys	Gln	Arg	Leu
			20					25					30		
Gln	Met	Tyr	Asn	Ser	Gln	His	Arg	Ser	Ala	Ile	Ser	Cys	Ile	Arg	Thr
	35					40					45				
Val	Trp	Arg	Thr	Glu	Gly	Leu	Gly	Ala	Phe	Tyr	Arg	Ser	Tyr	Thr	Thr
	50				55					60					
Gln	Leu	Thr	Met	Asn	Ile	Pro	Phe	Gln	Ser	Ile	His	Phe	Ile	Thr	Tyr
65				70					75					80	
Glu	Phe	Leu	Gln	Glu	Gln	Val	Asn	Pro	His	Arg	Thr	Tyr	Asn	Pro	Gln
			85				90						95		
Ser	His	Ile	Ile	Ser	Gly	Gly	Leu	Ala	Gly	Ala	Leu	Ala	Ala	Ala	
			100				105						110		

<210> 5465

<211> 497

<212> DNA

<213> Homo sapiens

<400> 5465

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497

<210> 5466
<211> 134
<212> PRT
<213> Homo sapiens

<400> 5466
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20 25 30
Val Arg Asp Glu Pro Pro Ala Lys Pro Val Gly Met Ser Gly Pro Ser
35 40 45
Trp Trp Asp Cys Leu Gly His Arg His Gln His Gly Val Arg Ala Ile
50 55 60
Ser Gly Asp Ile Gly Gly Ala Thr Thr Arg Trp Gly Ile Phe Asn Arg
65 70 75 80
Leu Glu Pro Leu Arg Leu Glu Arg Pro Thr Pro Gly Arg Arg Pro Pro
85 90 95
Leu Thr Pro Leu Leu Pro Leu Leu Trp Asp Pro Pro Val Asp Thr Pro
100 105 110
Asp Glu Asp Thr Gln Glu Ala Ser Ser Gln Asp Arg Arg Gln Leu Pro
115 120 125
Gly Gln Pro Arg Ser Ala
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<210> 5467
<211> 1329
<212> DNA
<213> Homo sapiens

<400> 5467
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480
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540
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 960
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 1329

<210> 5468

<211> 363

<212> PRT

<213> Homo sapiens

<400> 5468

Met	Asp	Ala	Val	Leu	Glu	Pro	Phe	Pro	Ala	Asp	Arg	Leu	Phe	Pro	Gly
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Ser	Ser	Phe	Leu	Asp	Leu	Gly	Asp	Leu	Asn	Glu	Ser	Asp	Phe	Leu	Asn
		20					25					30			
Asn	Ala	His	Phe	Pro	Glu	His	Leu	Asp	His	Phe	Thr	Glu	Asn	Met	Glu
		35				40					45				
Asp	Phe	Ser	Asn	Asp	Leu	Phe	Ser	Ser	Phe	Phe	Asp	Asp	Pro	Val	Leu
	50				55					60					
Asp	Glu	Lys	Ser	Pro	Leu	Leu	Asp	Met	Glu	Leu	Asp	Ser	Pro	Thr	Pro
65				70				75					80		
Gly	Ile	Gln	Ala	Glu	His	Ser	Tyr	Ser	Leu	Ser	Gly	Asp	Ser	Ala	Pro
		85					90					95			
Gln	Ser	Pro	Leu	Val	Pro	Ile	Lys	Met	Glu	Asp	Thr	Thr	Gln	Asp	Ala
		100					105					110			
Glu	His	Gly	Ala	Trp	Ala	Leu	Gly	His	Lys	Leu	Cys	Ser	Ile	Met	Val
	115					120					125				
Lys	Gln	Glu	Gln	Ser	Pro	Glu	Leu	Pro	Val	Asp	Pro	Leu	Ala	Ala	Pro
	130					135				140					
Ser	Ala	Met	Ala	Ala	Ala	Ala	Met	Ala	Thr	Thr	Pro	Leu	Leu	Gly	
145				150				155					160		
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<210> 5469
<211> 1292
<212> DNA
<213> Homo sapiens
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4645

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 cagagcccct gtgaagagaa tctggtgact tcagttgagc cccagcaga ggtgactcca
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 1292

<210> 5470

<211> 427

<212> PRT

<213> Homo sapiens

<400> 5470

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 35 40 45
 His Asp Thr Ala Cys Thr Ile Ala Ala Thr Ala Ser Val Val Lys Glu
 50 55 60
 Lys Leu Ala Thr Glu Gly Ser Ser Gly Ala Thr Glu Lys Met Lys Lys
 65 70 75 80
 Gly Leu Ser Asp Phe Leu Gly Val Ile Ser Asp Thr Phe Ala Pro Ser
 85 90 95
 Pro Asp Lys Thr Ile Asp Cys Asp Val Ile Thr Leu Met Gly Thr Pro
 100 105 110
 Ser Gly Thr Ala Glu Pro Tyr Asp Gly Thr Lys Ala Arg Leu Tyr Ser
 115 120 125
 Leu Gln Ser Asp Pro Ala Thr Tyr Cys Asn Glu Pro Asp Gly Pro Pro
 130 135 140
 Glu Leu Phe Asp Ala Trp Leu Ser Gln Phe Cys Leu Glu Glu Lys Lys
 145 150 155 160
 Gly Glu Ile Ser Glu Leu Leu Val Gly Ser Pro Ser Ile Arg Ala Leu
 165 170 175
 Tyr Thr Lys Met Val Pro Ala Ala Val Ser His Ser Glu Phe Trp His
 180 185 190
 Arg Tyr Phe Tyr Lys Val His Gln Leu Glu Gln Glu Ala Arg Arg

195	200	205
Asp Ala Leu Lys Gln Arg	Ala Glu Gln Ser Ile Ser	Glu Glu Pro Gly
210	215	220
Trp Glu Glu Glu Glu Glu	Glu Leu Met Gly Ile Ser	Pro Ile Ser Pro
225	230	235
Lys Glu Ala Lys Val Pro	Val Ala Lys Ile Ser Thr	Phe Pro Glu Gly
245	250	255
Glu Pro Gly Pro Gln Ser	Pro Cys Glu Asn Leu Val	Thr Ser Val
260	265	270
Glu Pro Pro Ala Glu Val	Thr Pro Ser Glu Ser Ser	Glu Ser Ile Ser
275	280	285
Leu Val Thr Gln Ile Ala	Asn Pro Ala Thr Ala	Pro Glu Ala Arg Val
290	295	300
Leu Pro Lys Asp Leu Ser	Gln Lys Leu Leu Glu Ala	Ser Leu Glu Glu
305	310	315
Gln Gly Leu Ala Val Asp	Val Gly Glu Thr Gly	Pro Ser Pro Pro Ile
325	330	335
His Ser Lys Pro Leu Thr	Pro Ala Gly His Thr	Gly Gly Pro Glu Pro
340	345	350
Arg Pro Pro Ala Arg Val	Glu Thr Leu Arg Glu	Glu Ala Pro Thr Asp
355	360	365
Leu Arg Val Phe Glu Leu	Asn Ser Asp Ser Gly	Lys Ser Thr Pro Ser
370	375	380
Asn Asn Gly Lys Lys Gly	Ser Ser Thr Asp Ile	Ser Glu Asp Trp Glu
385	390	395
Lys Asp Phe Asp Leu Asp	Met Thr Glu Glu Glu	Val Gln Met Ala Leu
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Ser Lys Val Asp Ala Ser	Gly Glu Leu Lys Met	
420	425	

<210> 5471

<211> 534

<212> DNA

<213> Homo sapiens

<400> 5471

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 300
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 420
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<210> 5472
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 5472
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 Pro Ser Ala His Leu Leu Gly Leu His Thr Gln Arg His Ala Asp Gly
 35 40 45
 Phe Leu Cys Leu Cys Thr His Ala Gly Ala Gly Gly Ser Val His Thr
 50 55 60
 Pro Pro Arg Leu Arg Ala Arg Pro Tyr Met Pro Cys Ala Pro Thr Gln
 65 70 75 80
 Ala Gly Leu Gly Ser Leu His Ser Pro Leu Arg Val His Ser His Ile
 85 90 95
 Ala Thr His Ser Cys Pro His Lys Leu Val Ser Leu Tyr Ser Ala His
 100 105 110
 Gly His Thr Cys Ala Pro His Leu Ala Thr Arg Thr Pro Gly Leu Cys
 115 120 125
 Ile Pro His Pro Gly Ser Gly Pro Arg Val Val Gly Pro Ala Gly Ser
 130 135 140
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 145 150 155 160
 Ala

<210> 5473
 <211> 691
 <212> DNA
 <213> Homo sapiens

<400> 5473
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 180
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 240
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 420
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 480
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 691

<210> 5474

<211> 139

<212> PRT

<213> Homo sapiens

<400> 5474

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Ser	Asn	His	Thr	Ile	Trp	Phe	Gly	His	Phe	Thr	Thr	Ser	Thr	Ile	Leu
			20				25						30		
Ser	Pro	Ser	Pro	Gly	Ile	Arg	Ser	Ile	Met	Ser	Ser	Ala	Ile	Ala	Tyr
			35				40					45			
Leu	Cys	Gly	His	Leu	His	Thr	Leu	Gly	Gly	Leu	Met	Pro	Val	Leu	His
	50				55					60					
Thr	Arg	His	Phe	Gln	Gly	Thr	Leu	Glu	Leu	Glu	Val	Gly	Asp	Trp	Lys
65				70					75					80	
Asp	Asn	Arg	Arg	Tyr	Arg	Ile	Phe	Ala	Phe	Asp	His	Asp	Leu	Phe	Ser
			85					90					95		
Phe	Ala	Asp	Leu	Ile	Phe	Gly	Lys	Trp	Pro	Val	Val	Leu	Ile	Thr	Asn
			100				105					110			
Pro	Lys	Ser	Leu	Leu	Tyr	Ser	Cys	Gly	Glu	His	Glu	Pro	Leu	Glu	Arg
			115				120					125			
Leu	Leu	His	Ser	Thr	His	Ile	Arg	Leu	Val	Thr					
			130				135								

<210> 5475

<211> 628

<212> DNA

<213> Homo sapiens

<400> 5475

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 120
 aacaaccccc acgccagcta cagcgccctt ccgccagtga gctcctccga cagcgaggcc
 180
 cccgaggcca accccgccga cggcagtgac gctgacgagg acgatgagga ccgggggggtc
 240
 atggccgtca cagcggtaac cgccacagct gccagcgaca ggatggagag cgactcagac
 300
 tcagacaaga gtagcgacaa cagtggcctg aagaggaaga cgcctgcgct aaagatgtcg
 360
 gtctcgaaac gagcccgaaa ggcctccagc gacctggatc aggccagcgt gtcccatcc
 420
 gaagaggaga actcggaaag ctcatctgag tcggagaaga ccagcgacca ggacttcaca
 480

cctgagaaga aagcagcgggt ccgggcgcca cggagggggcc ctctggggggg acggaaaaaa
 540
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 628

<210> 5476
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 5476
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 Asn Glu Gly Leu Trp Glu Ile Gln Asn Asn Pro His Ala Ser Tyr Ser
 35 40 45
 Ala Pro Pro Pro Val Ser Ser Ser Asp Ser Glu Ala Pro Glu Ala Asn
 50 55 60
 Pro Ala Asp Gly Ser Asp Ala Asp Glu Asp Asp Glu Asp Arg Gly Val
 65 70 75 80
 Met Ala Val Thr Ala Val Thr Ala Thr Ala Ala Ser Asp Arg Met Glu
 85 90 95
 Ser Asp Ser Asp Ser Asp Lys Ser Ser Asp Asn Ser Gly Leu Lys Arg
 100 105 110
 Lys Thr Pro Ala Leu Lys Met Ser Val Ser Lys Arg Ala Arg Lys Ala
 115 120 125
 Ser Ser Asp Leu Asp Gln Ala Ser Val Ser Pro Ser Glu Glu Glu Asn
 130 135 140
 Ser Glu Ser Ser Ser Glu Ser Glu Lys Thr Ser Asp Gln Asp Phe Thr
 145 150 155 160
 Pro Glu Lys Lys Ala Ala Val Arg Ala Pro Arg Arg Gly Pro Leu Gly
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 Gly Arg Lys Lys Lys Lys Ala Pro Ser Ala Ser Asp Ser Asp Ser Lys
 180 185 190
 Ala Asp Ser Asp Gly Ala Lys Pro Glu Pro Val Ala Met Ala Arg Ser
 195 200 205
 Ala

<210> 5477
 <211> 727
 <212> DNA
 <213> Homo sapiens

<400> 5477
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 120
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 420
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<210> 5478

<211> 99

<212> PRT

<213> Homo sapiens

<400> 5478

Ser	Ala	Ser	Val	Lys	Ala	Arg	Ser	Pro	Gly	Pro	Tyr	Gly	Pro	Pro	Arg
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Pro	Trp	Gly	Trp	Ala	Gly	Pro	Tyr	Ser	Ala	Tyr	Val	Ser	Leu	Cys	Gly
		20						25					30		
Ala	Pro	Gly	Gln	Arg	Gly	Arg	Lys	Arg	Trp	Leu	Leu	Val	Arg	Leu	Tyr
		35				40						45			
Lys	Thr	Trp	Pro	Leu	Thr	Cys	Arg	Pro	Pro	Thr	Gln	Leu	Ala	Gly	Trp
	50					55				60					
Ala	Gly	Leu	Ser	Pro	Leu	Ala	Ser	Pro	Gly	Pro	Leu	Ala	Gly	Ser	Ser
65				70					75					80	
Thr	Ser	Leu	Ser	Ala	Leu	Ser	Ala	Arg	Pro	Pro	Pro	Asp	Ser	Ser	Ser
			85					90						95	

Leu Ser Pro

<210> 5479

<211> 1386

<212> DNA

<213> Homo sapiens

<400> 5479

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 120
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 180

cggaggcggg aggagcagga ggcacgagag aaggcgcagg ccgagcagga ggagcaggag
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 420
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 540
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 720
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 780
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 1260
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<210> 5480

<211> 251

<212> PRT

<213> Homo sapiens

<400> 5480

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Arg	Arg	Gln	Ala	Arg	Glu	Gln	Arg	Glu	Arg	Glu	Glu	Gln	Glu	Arg	Arg
			20				25					30			
Leu	Gln	Ala	Glu	Arg	Asp	Lys	Arg	Met	Arg	Glu	Glu	Gln	Leu	Ala	Arg


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  50      55      60
Glu Gln Glu Ala Arg Glu Lys Ala Gln Ala Glu Gln Glu Glu Gln Glu
  65      70      75      80
Arg Leu Gln Lys Gln Lys Glu Glu Ala Glu Ala Arg Ser Arg Glu Glu
      85      90      95
Ala Glu Arg Gln Arg Leu Glu Arg Glu Lys His Phe Gln Gln Gln Glu
      100      105      110
Gln Glu Arg Gln Glu Arg Arg Lys Arg Leu Glu Glu Ile Met Lys Arg
      115      120      125
Thr Arg Lys Ser Glu Val Ser Glu Thr Lys Gln Lys Gln Asp Ser Lys
      130      135      140
Glu Ala Asn Ala Asn Gly Ser Ser Pro Glu Pro Val Lys Ala Val Glu
  145      150      155      160
Ala Arg Ser Pro Gly Leu Gln Lys Glu Ala Val Gln Lys Glu Glu Pro
      165      170      175
Ile Pro Gln Glu Pro Gln Trp Ser Leu Pro Ser Lys Glu Leu Pro Ala
      180      185      190
Ser Leu Val Asn Gly Leu Gln Pro Leu Pro Ala His Gln Glu Asn Gly
      195      200      205
Phe Ser Thr Asn Gly Pro Ser Gly Asp Lys Ser Leu Ser Arg Thr Pro
      210      215      220
Glu Thr Leu Leu Pro Phe Ala Glu Ala Glu Phe Leu Lys Lys Ala
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<210> 5481
 <211> 1513
 <212> DNA
 <213> Homo sapiens

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  480
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  540
ggagtagtat ggaaaatgaa caaaagcaat ttaaattctc tggatgagca agaaggggtt
  600

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 660
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 720
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 780
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 840
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 900
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 960
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 1020
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 1080
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 1380
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<210> 5482

<211> 188

<212> PRT

<213> Homo sapiens

<400> 5482

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Phe	Leu	Tyr	Phe	Ala	Tyr	Gly	Ser	Asn	Leu	Leu	Thr	Glu	Arg	Ile	His
			20					25					30		
Leu	Arg	Asn	Pro	Ser	Ala	Ala	Phe	Phe	Cys	Val	Ala	Arg	Leu	Gln	Asp
		35				40						45			
Phe	Lys	Leu	Asp	Phe	Gly	Asn	Ser	Gln	Gly	Lys	Thr	Ser	Gln	Thr	Trp
	50					55					60				
His	Gly	Gly	Ile	Ala	Thr	Ile	Phe	Gln	Ser	Pro	Gly	Asp	Glu	Leu	Trp
65					70				75					80	
Gly	Val	Val	Trp	Lys	Met	Asn	Lys	Ser	Asn	Leu	Asn	Ser	Leu	Asp	Glu
				85				90						95	
Gln	Glu	Gly	Val	Lys	Ser	Gly	Met	Tyr	Val	Val	Ile	Glu	Val	Lys	Val
			100					105					110		
Ala	Thr	Gln	Glu	Gly	Lys	Glu	Ile	Thr	Cys	Arg	Ser	Tyr	Leu	Met	Thr

115	120	125
Asn Tyr Glu Ser Ala Pro Pro Ser Pro Gln Tyr Lys Lys Ile Ile Cys		
130	135	140
Met Gly Ala Lys Glu Asn Gly Leu Pro Leu Glu Tyr Gln Glu Lys Leu		
145	150	155
Lys Ala Ile Glu Pro Asn Asp Tyr Thr Gly Lys Val Ser Glu Glu Ile		
165	170	175
Glu Asp Ile Ile Lys Lys Gly Glu Thr Gln Thr Leu		
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<210> 5483

<211> 1552

<212> DNA

<213> Homo sapiens

<400> 5483

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1140

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<210> 5484

<211> 357

<212> PRT

<213> Homo sapiens

<400> 5484

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 Glu Leu Arg Gly Gly Phe Asp Trp Ser Leu His Phe Gln Trp Glu Gln
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 Leu Ser Pro Glu Gln Lys Ala Arg Arg Leu Asp Pro Thr Glu Pro Ile
 65 70 75 80
 Arg Thr Pro Ile Ile Ala Gly Gly Leu Phe Val Ile Asp Lys Ala Trp
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 Phe Asp Tyr Leu Gly Lys Tyr Asp Met Asp Met Asp Ile Trp Gly Gly
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 Glu Ile Val Pro Cys Ser Arg Val Gly His Val Phe Arg Lys Lys His
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 Pro Tyr Val Phe Pro Asp Gly Asn Ala Asn Thr Tyr Ile Lys Asn Thr
 145 150 155 160
 Lys Arg Thr Ala Glu Val Trp Met Asp Glu Tyr Lys Gln Tyr Tyr Tyr
 165 170 175
 Ala Ala Arg Pro Phe Ala Leu Glu Arg Pro Phe Gly Asn Val Glu Ser
 180 185 190
 Arg Leu Asp Leu Arg Lys Asn Leu Arg Cys Gln Ser Phe Lys Trp Tyr
 195 200 205
 Leu Glu Asn Ile Tyr Pro Glu Leu Ser Ile Pro Lys Glu Phe Ser Ile
 210 215 220
 Gln Lys Gly Asn Ile Arg Gln Arg Gln Lys Cys Leu Glu Ser Gln Arg
 225 230 235 240
 Gln Asn Asn Gln Glu Thr Pro Asn Leu Lys Leu Ser Pro Cys Ala Lys
 245 250 255
 Val Lys Gly Glu Asp Ala Lys Ser Gln Val Trp Ala Phe Thr Tyr Thr

	260		265		270										
Gln	Lys	Ile	Leu	Gln	Glu	Glu	Leu	Cys	Leu	Ser	Val	Ile	Thr	Leu	Phe
	275						280					285			
Pro	Gly	Ala	Pro	Val	Val	Leu	Val	Leu	Cys	Lys	Asn	Gly	Asp	Asp	Arg
	290					295					300				
Gln	Gln	Trp	Thr	Lys	Thr	Gly	Ser	His	Ile	Glu	His	Ile	Ala	Ser	His
305					310					315				320	
Leu	Cys	Leu	Asp	Thr	Asp	Met	Phe	Gly	Asp	Gly	Thr	Glu	Asn	Gly	Lys
			325						330					335	
Glu	Ile	Val	Val	Asn	Pro	Cys	Glu	Ser	Ser	Leu	Met	Ser	Gln	His	Trp
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<210> 5485

<211> 1549

<212> DNA

<213> Homo sapiens

<400> 5485

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 1020

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<211> 290

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<213> Homo sapiens

<400> 5486

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<211> 272

<212> PRT

<213> Homo sapiens

<400> 5488

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<212> DNA

<213> Homo sapiens

<400> 5489

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<211> 602

<212> PRT

<213> Homo sapiens

<400> 5492

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2040

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<210> 5496

<211> 345

<212> PRT

<213> Homo sapiens

<400> 5496

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Leu	Leu	Gly	Ser	Met	Ala	Leu	Ser	Asn	His	Tyr	Arg	Ser	Glu	Asp	Leu	35	40	45	
Leu	Asp	Val	Asp	Thr	Ala	Ala	Gly	Gly	Phe	Gln	Gln	Arg	Gln	Gly	Leu	50	55	60	
Lys	Tyr	Cys	Leu	Pro	Leu	Thr	Phe	Cys	Ile	His	Thr	Gly	Leu	Ser	Gln	65	70	75	80
Tyr	Ile	Ala	Val	Glu	Ala	Ala	Glu	Gly	Arg	Asn	Lys	Asn	Glu	Val	Phe	85	90	95	
Tyr	Gln	Cys	Pro	Asp	Gln	Met	Ala	Arg	Asn	Pro	Ala	Ala	Ile	Asp	Met	100	105	110	
Phe	Ile	Ile	Gly	Ala	Thr	Phe	Thr	Asp	Trp	Phe	Thr	Ser	Tyr	Val	Lys	115	120	125	
Asn	Val	Val	Ser	Gly	Gly	Phe	Pro	Ile	Ile	Arg	Asp	Gln	Ile	Phe	Arg	130	135	140	
Tyr	Val	His	Asp	Pro	Glu	Cys	Val	Ala	Thr	Thr	Gly	Asp	Ile	Thr	Val	145	150	155	160
Ser	Val	Ser	Thr	Ser	Phe	Leu	Pro	Glu	Leu	Ser	Ser	Val	His	Pro	Pro	165	170	175	
His	Tyr	Phe	Phe	Thr	Tyr	Arg	Ile	Arg	Ile	Glu	Met	Ser	Lys	Asp	Ala	180	185	190	
Leu	Pro	Glu	Lys	Ala	Cys	Gln	Leu	Asp	Ser	Arg	Tyr	Trp	Arg	Ile	Thr	195	200	205	
Asn	Ala	Lys	Gly	Asp	Val	Glu	Val	Gln	Gly	Pro	Gly	Val	Val	Gly		210	215	220	
Glu	Phe	Pro	Ile	Ile	Ser	Pro	Gly	Arg	Val	Tyr	Glu	Tyr	Thr	Ser	Cys	225	230	235	240
Thr	Thr	Phe	Ser	Thr	Thr	Ser	Gly	Tyr	Met	Glu	Gly	Tyr	Tyr	Thr	Phe	245	250	255	
His	Phe	Leu	Tyr	Phe	Lys	Asp	Lys	Ile	Phe	Asn	Val	Ala	Ile	Pro	Arg				

	260							265						270	
Phe	His	Met	Ala	Cys	Pro	Thr	Phe	Arg	Val	Ser	Ile	Ala	Arg	Leu	Glu
	275							280					285		
Met	Gly	Pro	Asp	Glu	Tyr	Glu	Glu	Met	Glu	Glu	Glu	Glu	Glu	Glu	Glu
	290						295					300			
Glu	Glu	Glu	Asp	Glu	Asp	Asp	Asp	Ser	Ala	Asp	Met	Asp	Glu	Ser	Asp
305					310					315				320	
Glu	Asp	Asp	Glu	Glu	Glu	Arg	Arg	Arg	Arg	Val	Phe	Asp	Val	Pro	Ile
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<210> 5497

<211> 1056

<212> DNA

<213> Homo sapiens

<400> 5497

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240
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300
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420
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1056

<210> 5498

<211> 150

<212> PRT

<213> Homo sapiens

<400> 5498

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          20           25           30
Ala Gln Leu Trp Trp Ser Ser Pro Phe Ile His Ser Pro Gly Glu Thr
          35           40           45
Asn Ile Pro His Thr Leu Thr Glu Pro His Ser Val Pro Gly Trp Cys
          50           55           60
Trp Asp Thr Leu Arg Arg His Gly Ala Gly Gln Gly His Pro Gly Met
          65           70           75           80
Ala Arg Ser Gly Thr Gly Glu Gly Gln Arg Glu Gly Asp Ile Glu Arg
          85           90           95
Glu Glu Asp Glu Glu Glu Gly Asn Arg Ser Arg Lys Ser Arg Asp Ser
          100          105          110
Arg Ser Gln Val Lys Gly Leu Pro Leu His Ser Arg Glu Gln Arg Asp
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Pro Ser Ala Gly Ala Ser Glu Lys Ser Arg Asn Pro Ser Arg Met Gly
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<210> 5499

<211> 1918

<212> DNA

<213> Homo sapiens

<400> 5499

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600

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 720
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 1918

<210> 5500

<211> 426

<212> PRT

<213> Homo sapiens

<400> 5500

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Leu	Arg	Phe	Asn	Glu	Thr	Thr	Leu	Cys	Lys	Pro	Leu	Val	Pro	Arg	Glu		
35						40						45					
His	Gln	Phe	Tyr	Glu	Thr	Leu	Pro	Ala	Glu	Met	Arg	Lys	Phe	Thr	Pro		
50						55						60					
Gln	Tyr	Lys	Gly	Val	Val	Ser	Val	Arg	Phe	Glu	Glu	Asp	Glu	Asp	Arg		
65			70						75			80					
Asn	Leu	Cys	Leu	Ile	Ala	Tyr	Pro	Leu	Lys	Gly	Asp	His	Gly	Ile	Val		
			85						90			95					
Asp	Ile	Ala	His	Asn	Ser	Asp	Cys	Glu	Pro	Lys	Ser	Lys	Leu	Leu	Arg		
			100			105						110					
Trp	Thr	Thr	Asn	Lys	Lys	His	His	Val	Leu	Glu	Thr	Glu	Lys	Thr	Pro		
115						120						125					
Lys	Asp	Trp	Val	Arg	Gln	His	Arg	Lys	Glu	Glu	Lys	Met	Lys	Ser	His		
130						135						140					
Lys	Leu	Glu	Glu	Glu	Phe	Glu	Trp	Leu	Lys	Lys	Ser	Glu	Val	Leu	Tyr		
145			150						155			160					
Tyr	Thr	Val	Glu	Lys	Gly	Asn	Ile	Ser	Ser	Gln	Leu	Lys	His	Tyr			
			165						170			175					
Asn	Pro	Trp	Ser	Met	Lys	Cys	His	Gln	Gln	Gln	Leu	Gln	Arg	Met	Lys		
			180			185						190					
Glu	Asn	Ala	Lys	His	Arg	Asn	Gln	Tyr	Lys	Phe	Ile	Leu	Leu	Glu	Asn		
195						200						205					
Leu	Thr	Ser	Arg	Tyr	Glu	Val	Pro	Cys	Val	Leu	Asp	Leu	Lys	Met	Gly		
210						215						220					
Thr	Arg	Gln	His	Gly	Asp	Asp	Ala	Ser	Glu	Glu	Lys	Ala	Ala	Asn	Gln		
225			230						235			240					
Ile	Arg	Lys	Cys	Gln	Gln	Ser	Thr	Ser	Ala	Val	Ile	Gly	Val	Xaa	Val		
			245						250			255					
Cys	Gly	Met	Gln	Val	Tyr	Gln	Ala	Gly	Ser	Gly	Gln	Leu	Met	Phe	Met		
			260			265						270					
Asn	Lys	Tyr	His	Gly	Arg	Lys	Leu	Ser	Val	Gln	Gly	Phe	Lys	Glu	Ala		
275						280						285					
Leu	Phe	Gln	Phe	Phe	His	Asn	Gly	Arg	Tyr	Leu	Arg	Arg	Glu	Leu	Leu		
290						295						300					
Gly	Pro	Val	Leu	Lys	Lys	Leu	Thr	Glu	Leu	Lys	Ala	Val	Leu	Glu	Arg		
305			310						315			320					
Gln	Glu	Ser	Tyr	Arg	Phe	Tyr	Ser	Ser	Ser	Leu	Leu	Val	Ile	Tyr	Asp		
			325						330			335					
Gly	Lys	Glu	Arg	Pro	Glu	Val	Val	Leu	Asp	Ser	Asp	Ala	Glu	Asp	Leu		
			340			345						350					
Glu	Asp	Leu	Ser	Glu	Glu	Ser	Ala	Asp	Glu	Ser	Ala	Gly	Ala	Tyr	Ala		
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Tyr	Lys	Pro	Ile	Gly	Ala	Ser	Ser	Val	Asp	Val	Arg	Met	Ile	Asp	Phe		
370						375						380					
Ala	His	Thr	Thr	Cys	Arg	Leu	Tyr	Gly	Glu	Asp	Thr	Val	Val	His	Glu		
385			390						395			400					
Gly	Gln	Asp	Ala	Gly	Tyr	Ile	Phe	Gly	Leu	Gln	Ser	Leu	Ile	Asp	Ile		
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Val																	

<210> 5501

<211> 568

<212> DNA

<213> Homo sapiens

<400> 5501

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 360
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<210> 5502

<211> 110

<212> PRT

<213> Homo sapiens

<400> 5502

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			20					25					30		
Gly	Ala	Ala	Leu	Gln	Val	Leu	Ala	His	Ala	Gln	Gln	Ala	Pro	His	Ser
			35				40					45			
Phe	Val	Thr	Thr	Lys	Gly	Thr	Val	Leu	Phe	Thr	Ala	Pro	Pro	Ala	Ser
			50			55					60				
Ala	Trp	Gln	Leu	Cys	Leu	Pro	Val	Leu	Tyr	Leu	Ile	Pro	Pro	Ala	Lys
65					70				75					80	
Leu	Ala	Arg	Gln	Gly	Pro	Ala	Leu	Lys	Glu	Ile	Ser	Leu	Pro	Asp	Pro
			85					90					95		
Trp	Thr	Trp	Lys	Trp	Arg	Leu	His	Val	Pro	Ala	Leu	Ala	Ala		
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<210> 5503

<211> 1679

<212> DNA

<213> Homo sapiens

<400> 5503

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1679

<210> 5504
 <211> 392
 <212> PRT
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<400> 5504
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 35 40 45
 Ser Gly Glu Ala Thr Gly Ala Asp Ala Gly Arg Leu Cys Pro Pro Pro
 50 55 60
 Arg Ser Arg Ala Pro His Lys Asp Arg Thr Leu Ala Arg Ser Arg Pro
 65 70 75 80
 Gln Thr Gln Gly Glu Asp Cys Ser Leu Pro Val Gly Glu Val Lys Ile
 85 90 95
 Gly Lys Arg Ser Tyr Ser Pro Ala Pro Gly Lys Gln Lys Lys Pro Asn
 100 105 110
 Ala Met Gly Leu Ala Pro Thr Ser Ser Pro Gly Ala Pro Asn Ser Ala
 115 120 125
 Arg Ala Thr His Asn Pro Val Pro Cys Gly Ser Gly Arg Gly Pro Cys
 130 135 140
 His Leu Ala Asn Leu Leu Ser Thr Leu Ala Gln Ser Asn Gln Asn Arg
 145 150 155 160
 Asp His Lys Gln Gly Pro Pro Glu Val Thr Cys Gln Ile Arg Lys Lys
 165 170 175
 Thr Arg Thr Leu Tyr Arg Ser Asp Gln Leu Glu Glu Leu Glu Lys Ile
 180 185 190
 Phe Gln Glu Asp His Tyr Pro Asp Ser Asp Lys Arg Arg Glu Ile Ala
 195 200 205
 Gln Thr Val Gly Val Thr Pro Gln Arg Ile Met Val Lys Gly Ala Gly
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 Ser Leu Val Ala Gly Trp Ser Gly Gly Gly Pro Thr Ile Glu Thr Leu
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 245 250 255
 Arg Arg Ala Lys Trp Arg Lys Met Glu Lys Leu Asn Gly Lys Glu Ser
 260 265 270
 Lys Asp Asn Pro Ala Ala Pro Gly Pro Ala Ser Ser Gln Cys Ser Ser
 275 280 285
 Ala Ala Glu Ile Leu Pro Ala Val Pro Met Glu Pro Lys Pro Asp Pro
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 Phe Pro Gln Glu Ser Pro Leu Asp Thr Phe Pro Glu Pro Pro Met Leu
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 325 330 335
 Gln Arg Val Val Thr Pro Pro Leu Phe Ser Pro Pro Pro Val Arg Arg
 340 345 350
 Ala Asp Leu Pro Phe Pro Leu Gly Pro Val His Thr Pro Gln Leu Met
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<210> 5505
 <211> 1099
 <212> DNA
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 840
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<210> 5506
 <211> 280
 <212> PRT
 <213> Homo sapiens

<400> 5506

Lys Leu Gly Arg Pro Ser Gly Ser Cys Arg Gly Gly Arg Ala Gln Leu
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 20 25 30
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 35 40 45
 Arg Gln Leu Leu Leu Asn Cys Arg Leu Val Cys Ser Leu Trp Arg Asp
 50 55 60
 Leu Ile Asp Leu Val Thr Leu Trp Lys Arg Lys Cys Leu Arg Glu Gly
 65 70 75 80
 Phe Ile Thr Glu Asp Trp Asp Gln Pro Val Ala Asp Trp Lys Ile Phe
 85 90 95
 Tyr Phe Leu Arg Ser Leu His Arg Asn Leu Leu His Asn Pro Cys Ala
 100 105 110
 Glu Glu Gly Phe Glu Phe Trp Ser Leu Asp Val Asn Gly Gly Asp Glu
 115 120 125
 Trp Lys Val Glu Asp Leu Ser Arg Asp Gln Arg Lys Glu Phe Pro Asn
 130 135 140
 Asp Gln Val Lys Lys Tyr Phe Val Thr Ser Tyr Tyr Thr Cys Leu Lys
 145 150 155 160
 Ser Gln Val Val Asp Leu Lys Ala Glu Gly Tyr Trp Glu Glu Leu Leu
 165 170 175
 Asp Thr Phe Arg Pro Asp Ile Val Val Lys Asp Trp Phe Ala Ala Arg
 180 185 190
 Ala Asp Cys Gly Cys Thr Tyr Gln Leu Lys Val Gln Leu Leu Ser Ala
 195 200 205
 Asp Tyr Phe Val Leu Ala Ser Phe Glu Pro Asp Pro Ala Thr Ile Gln
 210 215 220
 Gln Lys Ser Asp Ala Lys Trp Arg Glu Val Ser His Thr Phe Ser Asn
 225 230 235 240
 Tyr Pro Pro Gly Val Arg Tyr Ile Trp Phe Gln His Gly Gly Val Asp
 245 250 255
 Thr His Tyr Trp Ala Gly Trp Tyr Gly Pro Arg Val Thr Asn Ser Ser
 260 265 270
 Ile Thr Ile Gly Pro Pro Leu Pro
 275 280

<210> 5507

<211> 1658

<212> DNA

<213> Homo sapiens

<400> 5507

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 180
 gacagcatgt atggtgaatg tcggacctac atcattcatt actatcttat ggatgatagc
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aaccgccagc gtgtgcccaa agttttggtg gaaaatgcaa agaacttccc tcagtgtgtg
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ctagaaatct ctgaccaaga agtgttggaa tggatactg ctaaagactt cattgttggg
420
aagtcactca ctatccttgg gagaactttc ttcatttatg atttgtatcc atttactcga
480
cggattaca aagagaagtt tggaatcact gatttaccac gtattgatgt gagcaagcgg
540
gaaccacctc cagtaaaaca ggagttgcct ccttataacg gttttggact agtggaagat
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gacaaagacc gcagatttgt cttctcttac tttctagcta ccgacatgat cagtatcttt
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1380
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<210> 5508

<211> 448

<212> PRT

<213> Homo sapiens

<400> 5508

Xaa Leu Glu Ser Gln Gly Ile Glu Leu Asn Pro Pro Glu Lys Met Ala

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Thr Pro Ser Asp Phe Asp Gln Leu Lys Gln Phe Leu Thr Phe Asp Lys
35           40           45
Gln Val Leu Arg Phe Tyr Ala Ile Trp Asp Asp Thr Asp Ser Met Tyr
50           55           60
Gly Glu Cys Arg Thr Tyr Ile Ile His Tyr Tyr Leu Met Asp Asp Thr
65           70           75           80
Val Glu Ile Arg Glu Val His Glu Arg Asn Asp Gly Arg Asp Pro Phe
85           90           95
Pro Leu Leu Met Asn Arg Gln Arg Val Pro Lys Val Leu Val Glu Asn
100          105          110
Ala Lys Asn Phe Pro Gln Cys Val Leu Glu Ile Ser Asp Gln Glu Val
115          120          125
Leu Glu Trp Tyr Thr Ala Lys Asp Phe Ile Val Gly Lys Ser Leu Thr
130          135          140
Ile Leu Gly Arg Thr Phe Phe Ile Tyr Asp Cys Asp Pro Phe Thr Arg
145          150          155          160
Arg Tyr Tyr Lys Glu Lys Phe Gly Ile Thr Asp Leu Pro Arg Ile Asp
165          170          175
Val Ser Lys Arg Glu Pro Pro Pro Val Lys Gln Glu Leu Pro Pro Tyr
180          185          190
Asn Gly Phe Gly Leu Val Glu Asp Ser Ala Gln Asn Cys Phe Ala Leu
195          200          205
Ile Pro Lys Ala Pro Lys Lys Asp Val Ile Lys Met Leu Val Asn Asp
210          215          220
Asn Lys Val Leu Arg Tyr Leu Ala Val Leu Glu Ser Pro Ile Pro Glu
225          230          235          240
Asp Lys Asp Arg Arg Phe Val Phe Ser Tyr Phe Leu Ala Thr Asp Met
245          250          255
Ile Ser Ile Phe Glu Pro Pro Val Arg Asn Ser Gly Ile Ile Gly Gly
260          265          270
Lys Tyr Leu Gly Arg Thr Lys Val Val Lys Pro Tyr Ser Thr Val Asp
275          280          285
Asn Pro Val Tyr Tyr Gly Pro Ser Asp Phe Phe Ile Gly Ala Val Ile
290          295          300
Glu Val Phe Gly His Arg Phe Ile Ile Leu Asp Thr Asp Glu Tyr Val
305          310          315          320
Leu Lys Tyr Met Glu Ser Asn Ala Ala Gln Tyr Ser Pro Glu Ala Leu
325          330          335
Ala Ser Ile Gln Asn His Val Arg Lys Arg Glu Ala Pro Ala Pro Glu
340          345          350
Ala Glu Ser Lys Gln Thr Glu Lys Asp Pro Gly Val Gln Glu Leu Glu
355          360          365
Ala Leu Ile Asp Thr Ile Gln Lys Gln Leu Lys Asp His Ser Cys Lys
370          375          380
Asp Asn Ile Arg Glu Ala Phe Gln Ile Tyr Asp Lys Glu Ala Ser Gly
385          390          395          400
Tyr Val Asp Arg Asp Met Phe Phe Lys Ile Cys Glu Ser Leu Asn Val
405          410          415
Pro Val Asp Asp Ser Leu Val Lys Glu Leu Ile Arg Met Cys Ser His
420          425          430
Gly Glu Gly Lys Ile Asn Tyr Tyr Asn Phe Val Arg Ala Phe Ser Asn

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435

440

445

<210> 5509

<211> 818

<212> DNA

<213> Homo sapiens

<400> 5509

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aatgttttga gaacatggaa tcatgtgaac ttattatgtg gtaagtacag ataccagggtg
240
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540
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<210> 5510

<211> 105

<212> PRT

<213> Homo sapiens

<400> 5510

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Ala	Phe	Ser	Gln	Ile	Pro	Gly	His	Asn	Leu	Asn	Lys	Lys	Thr	Pro	Pro
			20					25					30		
Gly	Val	Lys	Pro	Pro	Glu	Ser	His	Val	Cys	Gly	Glu	Val	Gly	Val	Gly
			35				40					45			
Tyr	Pro	Ser	Thr	Glu	Arg	His	Ile	Arg	Asp	Arg	Leu	Gly	Arg	Lys	Pro
			50				55				60				
Cys	Glu	Tyr	Gln	Glu	Cys	Arg	Gln	Lys	Ala	Tyr	Thr	Cys	Lys	Pro	Cys
65					70					75				80	
Gly	Asn	Ala	Phe	Arg	Phe	His	His	Ser	Phe	His	Ile	His	Glu	Arg	Pro

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 <211> 379
 <212> DNA
 <213> Homo sapiens
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 240
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<210> 5512
 <211> 101
 <212> PRT
 <213> Homo sapiens

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 Val Ser Ala Leu Gly Leu Glu Ala Gln Glu Asp Glu Asp Pro Ser Tyr
 35 40 45
 Lys Trp Arg Glu Glu His Arg Leu Ser Ala Thr Gln Gln Ser Glu Leu
 50 55 60
 Arg Asp Val Cys Asp Tyr Ala Ile Glu Thr Met Pro Ser Phe Pro Lys
 65 70 75 80
 Glu Gly Ser Ala Asp Val Glu Pro Asn Gln Glu Ser Leu Val Ala Glu
 85 90 95
 Ala Cys Asp Thr Pro
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<210> 5513
 <211> 837
 <212> DNA
 <213> Homo sapiens

<400> 5513
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240
tggctgtatg agggcctgag cagggagaaa gcagaggacc tgctgttggt acctgggaac
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720
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837

<210> 5514

<211> 248

<212> PRT

<213> Homo sapiens

<400> 5514

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Gly Gly Pro Ala Glu Leu Ser Leu Arg Leu Gly Glu Pro Leu Thr Ile
35 40 45
Val Ser Glu Asp Gly Asp Trp Trp Thr Val Leu Ser Glu Val Ser Gly
50 55 60
Arg Glu Tyr Asn Ile Pro Ser Val His Val Ala Lys Val Ser His Gly
65 70 75 80
Trp Leu Tyr Glu Gly Leu Ser Arg Glu Lys Ala Glu Asp Leu Leu Leu
85 90 95
Leu Pro Gly Asn Pro Gly Gly Ala Phe Leu Ile Arg Glu Ser Gln Thr
100 105 110
Arg Arg Gly Ser Tyr Ser Leu Ser Val Arg Leu Ser Arg Pro Ala Ser
115 120 125
Trp Asp Arg Ile Arg His Tyr Arg Ile His Cys Leu Asp Asn Gly Trp
130 135 140
Leu Tyr Ile Ser Pro Arg Leu Thr Phe Pro Ser Leu Gln Ala Leu Val
145 150 155 160
Asp His Tyr Ser Glu Leu Ala Asp Asp Ile Cys Cys Leu Leu Lys Glu

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                165                170                175
Pro Cys Val Leu Gln Arg Ala Gly Pro Leu Pro Gly Lys Asp Ile Pro
                180                185                190
Leu Pro Val Thr Val Gln Arg Thr Pro Leu Asn Trp Lys Glu Leu Asp
                195                200                205
Ser Ser Leu Leu Phe Ser Glu Ala Ala Thr Gly Glu Glu Ser Leu Leu
                210                215                220
Ser Glu Gly Leu Arg Glu Ser Leu Ser Phe Tyr Ile Ser Leu Asn Asp
225                230                235                240
Glu Ala Val Ser Leu Asp Asp Ala
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<210> 5515
 <211> 420
 <212> DNA
 <213> Homo sapiens

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<210> 5516
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 <212> PRT
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20          25          30
Arg Gln Lys Lys Leu Glu Met Glu Lys Leu Gln Leu Gln Ala Leu Glu
35          40          45
Gln Glu His Lys Lys Leu Ala Arg Leu Glu Glu Glu Arg Gly Lys
50          55          60
Asn Lys Gln Val Val Leu Met Leu Val Lys Glu Cys Lys Gln Leu Ser
65          70          75          80
Ser Lys Val Ile Glu Glu Ala Gln Lys Leu Glu Asp Val Met Ala Lys
85          90          95
Leu Ala Ser Ser Leu Cys His Gln His Leu Leu His Ser Leu Ser Gly
100         105         110
Val Pro Gly Thr Gly His Ile Asp

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115

120

<210> 5517
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 <212> DNA
 <213> Homo sapiens

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<210> 5518
 <211> 85
 <212> PRT
 <213> Homo sapiens

<400> 5518
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 Ile Val Val Gly Ser Ser Asp Arg Ile Arg Ala Ser Ser Leu Gln Val
 35 40 45
 Gln Lys Gln Phe Lys Thr Leu Met Ile Ala Leu Gln Gln Pro Thr His
 50 55 60
 Gly Asp Met Val Ile Val Pro Thr Cys Cys Ser Val Ile Cys Arg Ala
 65 70 75 80
 Ser Asp Trp Phe Lys

85

<210> 5519
 <211> 401
 <212> DNA
 <213> Homo sapiens

<400> 5519
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 120
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 aaaacaaaaca cacacagaag ttggcgctgg gcaccacatt ctctcttga cctaaccatc
 240
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 300
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<210> 5520
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 5520
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 Gln Arg Gln Leu Leu Cys Val Phe Val Phe Arg Asp Ser Leu Arg Glu
 35 40 45
 Gly Asn Ala Arg Arg Asn Met Val Ser Ser Glu Ala His Gly Cys Phe
 50 55 60
 Leu Arg Pro Ala Val Phe Tyr Ala Thr Tyr Pro Cys Thr Ser Tyr Ala
 65 70 75 80
 Lys Glu Thr Lys Pro Ser Ala Cys Leu Phe Pro Leu Leu Ile Ile Gly
 85 90 95
 Lys Trp Met Leu Trp
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<210> 5521
 <211> 2524
 <212> DNA
 <213> Homo sapiens

<400> 5521
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1740

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 Ser His Pro Thr Ala Ser Ala Leu Ser Thr Gly Ser Pro Pro Met Lys
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 1125 1130 1135
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 Trp Ile Gln Ser Gln Thr Val Thr Gln Glu Ile Asp Ile Gln Ala Cys
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<210> 5525

<211> 761

<212> DNA

<213> Homo sapiens

<400> 5525

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<211> 102

<212> PRT

<213> Homo sapiens

<400> 5526

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Leu	Leu	Asp	Asp	Ala	Gln	Arg	Leu	Leu	Tyr	Arg	Asn	Val	Met	Leu	Glu
			20				25					30			
Asn	Phe	Thr	Leu	Leu	Ala	Ser	Leu	Gly	Leu	Ala	Ser	Ser	Lys	Thr	His
		35				40					45				
Glu	Ile	Thr	Gln	Leu	Glu	Ser	Trp	Glu	Glu	Pro	Phe	Met	Pro	Ala	Trp
	50				55					60					
Glu	Val	Val	Thr	Ser	Ala	Ile	Pro	Arg	Glu	Thr	Leu	Arg	Met	Ala	Phe
65					70				75					80	
Met	Arg	Glu	Leu	Ala	Ile	Glu	His	His	Ser	Ser	Lys	Tyr	Ala	His	Trp
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Arg	Gln	Asp	Glu	Asn	Ser										
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<210> 5527

<211> 728

<212> DNA

<213> Homo sapiens

<400> 5527

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<211> 176

<212> PRT

<213> Homo sapiens

<400> 5528

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			20					25					30		
Val	Thr	Gly	Leu	Lys	Leu	Ser	Gln	Asp	Leu	Asp	Asp	Leu	Ala	Ile	Leu
		35					40					45			
Tyr	Leu	Ala	Thr	Val	Gln	Ala	Ile	Ala	Leu	Gly	Thr	Arg	Phe	Ile	Ile
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Glu	Ala	Met	Glu	Ala	Ala	Gly	His	Ser	Ile	Ser	Thr	Leu	Phe	Leu	Cys
65					70					75				80	
Gly	Gly	Leu	Ser	Lys	Asn	Pro	Leu	Phe	Val	Gln	Met	His	Ala	Asp	Ile
			85					90						95	
Thr	Gly	Met	Pro	Val	Val	Leu	Ser	Gln	Glu	Val	Glu	Ser	Val	Leu	Val
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Gly	Ala	Ala	Val	Leu	Gly	Ala	Cys	Ala	Ser	Gly	Asp	Phe	Ala	Ser	Val
		115					120					125			
Gln	Glu	Ala	Met	Ala	Lys	Met	Ser	Lys	Val	Gly	Lys	Val	Val	Phe	Pro
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Arg	Leu	Gln	Asp	Lys	Lys	Tyr	Tyr	Asp	Lys	Lys	Tyr	Gln	Val	Phe	Leu
145					150					155				160	
Lys	Leu	Val	Glu	His	Gln	Lys	Glu	Tyr	Leu	Ala	Ile	Met	Asn	Asp	Asp
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<210> 5529

<211> 2602

<212> DNA

<213> Homo sapiens

<400> 5529

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240
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360
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420
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<211> 603

<212> PRT

<213> Homo sapiens

<400> 5530

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		20						25				30			
Leu	Asn	Leu	Cys	Ala	Arg	Arg	Arg	Thr	Arg	Val	Gln	Arg	Pro	Ile	Val
	35					40					45				
Arg	Leu	Leu	Ser	Cys	Pro	Gly	Thr	Val	Ala	Lys	Asp	Leu	Arg	Arg	Asp
	50				55						60				
Glu	Gln	Pro	Ser	Gly	Ser	Val	Glu	Thr	Gly	Phe	Glu	Asp	Lys	Ile	Pro
65				70					75					80	
Lys	Arg	Arg	Phe	Ser	Glu	Met	Gln	Asn	Glu	Arg	Arg	Glu	Gln	Ala	Gln
			85					90					95		
Arg	Thr	Val	Leu	Ile	His	Cys	Pro	Glu	Lys	Ile	Ser	Glu	Asn	Lys	Phe
		100						105					110		
Leu	Lys	Tyr	Leu	Ser	Gln	Phe	Gly	Pro	Ile	Asn	Asn	His	Phe	Phe	Tyr
		115				120						125			
Glu	Ser	Phe	Gly	Leu	Tyr	Ala	Val	Val	Glu	Phe	Cys	Gln	Lys	Glu	Ser
	130					135					140				
Ile	Gly	Ser	Leu	Gln	Asn	Gly	Thr	His	Thr	Pro	Ser	Thr	Ala	Met	Glu


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Gln Thr Ser Glu Arg Ser Arg Val Arg Ser Ser Asn Gln Leu Pro Arg
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Ser Asn Lys Gln Leu Phe Glu Leu Leu Cys Tyr Ala Glu Ser Ile Asp
          195          200          205
Asp Gln Leu Asn Thr Leu Leu Lys Glu Phe Gln Leu Thr Glu Glu Asn
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Thr Lys Leu Arg Tyr Leu Thr Cys Ser Leu Ile Glu Asp Met Ala Ala
225          230          235          240
Ala Tyr Phe Pro Asp Cys Ile Val Arg Pro Phe Gly Ser Ser Val Asn
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Glu Thr Arg Asn Leu Ser Ala His Lys Ile Ser Gly Asn Phe Leu Met
          275          280          285
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          355          360          365
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Leu Thr Met Met Val Ile Phe Phe Leu Gln Arg Arg Ser Pro Pro Ile
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Leu Pro Thr Leu Asp Ser Leu Lys Thr Leu Ala Asp Ala Glu Asp Lys
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Cys Val Ile Glu Gly Asn Asn Cys Thr Phe Val Arg Asp Leu Ser Arg
          435          440          445
Ile Lys Pro Ser Gln Asn Thr Glu Thr Leu Glu Leu Leu Leu Lys Glu
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Phe Phe Glu Tyr Phe Gly Asn Phe Ala Phe Asp Lys Asn Ser Ile Asn
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Ile Gln Asn Pro Phe Glu Thr Ser Leu Asn Ile Ser Lys Asn Val Ser
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Gln Ser Gln Leu Gln Lys Phe Val Asp Leu Ala Arg Glu Ser Ala Trp
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Pro Trp Gly Leu Val Ser Leu Leu Leu Pro Ser Ala Pro Asn Arg Lys
545          550          555          560
Ser Phe Thr Lys Lys Lys Ser Asn Lys Phe Ala Ile Glu Thr Val Lys
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<212> DNA
<213> Homo sapiens
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 <212> PRT
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 35 40 45
 Glu Asn Gly Gln Arg Lys Tyr Gly Gly Pro Pro Pro Gly Trp Glu Gly
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 Pro His Pro Gln Arg Gly Cys Glu Val Phe Val Gly Lys Ile Pro Arg
 65 70 75 80
 Asp Val Tyr Glu Asp Glu Leu Val Pro Val Phe Glu Ala Val Gly Arg
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 Ile Tyr Glu Leu Arg Leu Met Met Asp Phe Asp Gly Lys Asn Arg Gly
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 Arg Glu Leu Asn Asn Tyr Glu Ile Arg Pro Gly Arg Leu Leu Gly Val
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 Cys Cys Ser Val Asp Asn Cys Arg Leu Phe Ile Gly Gly Ile Pro Lys
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 Asn Arg Gly Phe Ala Phe Val Glu Tyr Glu Ser His Arg Ala Ala Ala
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 Thr Thr Glu Asp Thr Ile Lys Lys Ser Phe Gly Gln Phe Asn Pro Gly
 260 265 270
 Cys Val Glu Arg Val Lys Lys Ile Arg Asp Tyr Ala Phe Val His Phe
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 Thr Ser Arg Glu Asp Ala Val His Ala Met Asn Asn Leu Asn Gly Thr
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 Glu Leu Glu Gly Ser Cys Leu Glu Val Thr Leu Ala Lys Pro Val Asp
 305 310 315 320
 Lys Glu Gln Tyr Ser Arg Tyr Gln Lys Ala Ala Arg Gly Gly Gly Ala
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 Ala Glu Ala Ala Gln Gln Pro Ser Tyr Val Tyr Ser Cys Asp Pro Tyr

340 345 350
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 385 390 395 400
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 405 410 415
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 Phe Gln Gly Arg Pro Ile Thr Pro Val Tyr Thr Val Ala Pro Asn Val
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 <211> 505
 <212> DNA
 <213> Homo sapiens

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 35 40 45
 Leu Ala Ser Leu Ser Ala Glu Glu Leu Lys Glu Leu Glu Arg Glu Leu
 50 55 60
 Glu Asp Ile Glu Pro Asp Arg Asn Leu Pro Val Gly Leu Arg Gln Lys
 65 70 75 80
 Ser Leu Thr Glu Lys Thr Pro Thr Gly Thr Phe Ser Arg Glu Ala Leu
 85 90 95
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 <212> DNA
 <213> Homo sapiens

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<211> 306

<212> PRT

<213> Homo sapiens

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Val Ser Ile Ala Ala Thr Ile Ile Tyr Ala Tyr Ala Trp Leu Val Pro
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<210> 5537

<211> 2881

<212> DNA

<213> Homo sapiens

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<211> 352

<212> PRT

<213> Homo sapiens

<400> 5538

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Leu Leu Pro Met Tyr Ser Asp Thr Arg Ala Arg Ser Ser Asp Asp Ser		320
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<211> 1887

<212> DNA

<213> Homo sapiens

<400> 5539

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 Ala Pro Trp Cys Ser Val Ser Ser Gly Pro Ser Arg Tyr Val Leu Gly
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 65 70 75 80
 His Ser Ala Lys Val His Ser Val Ala Trp Ser Cys Asp Gly Arg Arg
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 Leu Ala Ser Gly Ser Phe Asp Lys Thr Ala Ser Val Phe Leu Leu Glu
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 Arg Thr Gly Trp Ser Lys Lys Thr Ile Ile Gly Asp Met Gly Ile Xaa
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 Ile Lys Phe Asp Pro Met Gly Lys Tyr Phe Ala Thr Gly Ser Ala Asp
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<211> 1854

<212> DNA

<213> Homo sapiens

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<211> 315

<212> PRT

<213> Homo sapiens

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<210> 5544

<211> 1141

<212> PRT

<213> Homo sapiens

<400> 5544

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Glu	Pro	Ser	Leu	Glu	Ile	Leu	Pro	Arg	Thr	Ser	Leu	His	Ser	Ile	Pro			
		35					40					45						
Val	Thr	Val	Glu	Val	Lys	Pro	Val	Leu	Pro	Arg	Ala	Met	Pro	Ser	Ser			
	50					55					60							
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Ala	Leu	Val	Gly	Ser	Val	Asp	Pro	Thr	Leu	Arg	Glu	Gln	Gln	Leu	Gln			
				85					90						95			
Gln	Glu	Leu	Leu	Ala	Leu	Lys	Gln	Gln	Gln	Gln	Leu	Gln	Lys	Gln	Leu			
			100					105					110					
Leu	Phe	Ala	Glu	Phe	Gln	Lys	Gln	His	Asp	His	Leu	Thr	Arg	Gln	His			
	115						120					125						
Glu	Val	Gln	Leu	Gln	Lys	His	Leu	Lys	Gln	Gln	Gln	Glu	Met	Leu	Ala			
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Lys	Glu	Ser	Ala	Ile	Ala	Ser	Thr	Glu	Val	Lys	Leu	Arg	Leu	Gln	Glu			
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Phe	Leu	Leu	Ser	Lys	Ser	Lys	Glu	Pro	Thr	Pro	Gly	Gly	Leu	Asn	His			
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225					230					235					240			
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Tyr	Lys	Leu	Pro	Leu	Pro	Gly	Pro	Tyr	Asp	Ser	Arg	Asp	Asp	Phe	Pro			
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Leu	Arg	Lys	Thr	Ala	Ser	Glu	Pro	Asn	Leu	Lys	Val	Arg	Ser	Arg	Leu			
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Lys	Gln	Lys	Val	Ala	Glu	Arg	Arg	Ser	Ser	Pro	Leu	Leu	Arg	Arg	Lys			
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Asp	Gly	Thr	Val	Ile	Ser	Thr	Phe	Lys	Lys	Arg	Ala	Val	Glu	Ile	Thr			
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Gly	Pro	Ser	Ser	Pro	Asn	Ser	Ser	His	Ser	Thr	Ile	Ala	Glu	Asn	Gly			
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	355						360				365							
Arg																		

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      485              490              495
Ala Thr Ser Met Arg Thr Val Gly Lys Leu Pro Arg His Arg Pro Leu
      500              505              510
Ser Arg Thr Gln Ser Ser Pro Leu Pro Gln Ser Pro Gln Ala Leu Gln
      515              520              525
Gln Leu Val Met Gln Gln Gln His Gln Gln Phe Leu Glu Lys Gln Lys
      530              535              540
Gln Gln Gln Leu Gln Leu Gly Lys Ile Leu Thr Lys Thr Gly Glu Leu
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Pro Arg Gln Pro Thr Thr His Pro Glu Glu Thr Glu Glu Glu Leu Thr
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Glu Gln Gln Glu Val Leu Leu Gly Glu Gly Ala Leu Thr Met Pro Arg
      580              585              590
Glu Gly Ser Thr Glu Ser Glu Ser Thr Gln Glu Asp Leu Glu Glu Glu
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Pro Gly Ala Gly Tyr Lys Lys Leu Phe Ser Asp Ala Gln Pro Leu Gln
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Pro Leu Gln Val Tyr Gln Ala Pro Leu Ser Leu Ala Thr Val Pro His
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Lys Ser Pro Pro Asp Gln Pro Val Lys His Leu Phe Thr Thr Gly Val
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Val Tyr Asp Thr Phe Met Leu Lys His Gln Cys Met Cys Gly Asn Thr
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His Val His Pro Glu His Ala Gly Arg Ile Gln Ser Ile Trp Ser Arg
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Leu Gln Glu Thr Gly Leu Leu Ser Lys Cys Glu Arg Ile Arg Gly Arg
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Leu Val Ser Ala Gly Phe Asp Ala Val Glu Gly His Leu Ser Pro Leu
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Gly Gly Tyr Ser Val Thr Ala Arg Cys Phe Gly His Leu Thr Arg Gln
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Leu Met Thr Leu Ala Gly Gly Arg Val Val Leu Ala Leu Glu Gly Gly
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His Asp Leu Thr Ala Ile Cys Asp Ala Ser Glu Ala Cys Val Ser Ala
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Leu Leu Ser Val Glu Leu Gln Pro Leu Asp Glu Ala Val Leu Gln Gln
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Lys Pro Asn Ile Asn Ala Val Ala Thr Leu Glu Lys Val Ile Glu Ile
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Gln Ser Lys His Trp Ser Cys Val Gln Lys Phe Ala Ala Gly Leu Gly
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Arg Ser Leu Arg Glu Ala Gln Ala Gly Glu Thr Glu Glu Ala Glu Thr
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Val Ser Ala Met Ala Leu Leu Ser Val Gly Ala Glu Gln Ala Gln Ala
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<211> 1932

<212> DNA

<213> Homo sapiens

<400> 5545

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 <213> Homo sapiens

<400> 5546

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Asn Glu Met Leu Leu Asn Phe Asn Asn Leu Ser Ser Ala Arg Leu Gln
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Gln Met Ser Glu Arg Phe Leu His His Thr Arg Thr Leu Val Glu Met
65           70           75           80
Lys Arg Asp Leu Asp Ser Ile Phe Arg Arg Ile Arg Thr Leu Lys Gly
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Lys Leu Ala Arg Gln His Pro Glu Ala Phe Ser His Ile Pro Glu Ala
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Ser Phe Leu Glu Glu Glu Asp Glu Asp Pro Ile Pro Pro Ser Thr Thr
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Thr Thr Ile Ala Thr Ser Glu Gln Ser Thr Gly Ser Cys Asp Thr Ser
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 <211> 1391
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<400> 5547

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<213> Homo sapiens

<400> 5548

Xaa	Val	Leu	Arg	Arg	Thr	Val	Ser	Tyr	Arg	Leu	Leu	Leu	Trp	Gly	Arg
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			20					25					30		
Leu	Gln	Thr	Asn	Val	Arg	Ser	Gln	Ile	Leu	Arg	Leu	Arg	His	Thr	Ala
		35					40					45			
Phe	Val	Ile	Pro	Lys	Lys	Asn	Val	Pro	Thr	Ser	Lys	Arg	Glu	Thr	Tyr
	50					55					60				
Thr	Glu	Asp	Phe	Ile	Lys	Lys	Gln	Ile	Glu	Glu	Phe	Asn	Ile	Gly	Lys
65					70					75				80	
Arg	His	Leu	Ala	Asn	Met	Met	Gly	Glu	Asp	Pro	Glu	Thr	Phe	Thr	Gln
				85				90					95		
Glu	Asp	Ile	Asp	Arg	Ala	Ile	Ala	Tyr	Leu	Phe	Pro	Ser	Gly	Leu	Phe
			100				105					110			
Glu	Lys	Arg	Ala	Arg	Pro	Val	Met	Lys	His	Pro	Glu	Gln	Ile	Phe	Pro
		115					120					125			
Arg	Gln	Arg	Ala	Ile	Gln	Trp	Gly	Glu	Asp	Gly	Arg	Pro	Phe	His	Tyr

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	165		

<210> 5549
 <211> 1865
 <212> DNA
 <213> Homo sapiens

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<210> 5550

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5550

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		35				40						45			
Glu	Tyr	Tyr	Arg	Lys	Pro	Val	Glu	Glu	Leu	Thr	Glu	Glu	Glu	Lys	Tyr
	50					55				60					
Val	Arg	Glu	Leu	Lys	Lys	Thr	Gln	Leu	Ile	Lys	Ala	Ala	Pro	Ala	Gly
65				70					75					80	
Lys	Thr	Ser	Ser	Val	Phe	Glu	Asp	Pro	Val	Ile	Ser	Lys	Phe	Thr	Asn
			85					90						95	
Met	Met	Met	Ile	Gly	Gly	Asn	Lys	Val	Leu	Ala	Arg	Ser	Leu	Met	Ile
			100					105					110		
Gln	Thr	Leu	Glu	Ala	Val	Lys	Arg	Lys	Gln	Phe	Glu	Lys	Tyr	His	Ala
		115				120						125			
Ala	Ser	Ala	Glu	Glu	Gln	Ala	Thr	Ile	Glu	Arg	Asn	Pro	Tyr	Thr	Ile
		130				135					140				
Phe	His	Gln	Ala	Leu	Lys	Asn	Cys	Glu	Pro	Met	Ile	Gly	Leu	Val	Pro
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<210> 5551

<211> 1689

<212> DNA

<213> Homo sapiens

<400> 5551

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<210> 5552

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5552

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		20						25					30		
Tyr	Leu	Leu	Asp	Pro	Tyr	Val	Asn	Leu	Ala	Pro	Gly	Cys	Arg	Ser	Leu
	35						40					45			
Phe	Ser	Val	Ile	Val	Arg	Val	Val	Gly	Asp	Leu	Met	Leu	Arg	Ile	Gln
	50					55					60				
Arg	Ile	Gln	Asp	Phe	Thr	Pro	Lys	Leu	Leu	Leu	Val	Arg	Lys	Arg	Leu
65					70					75				80	
Leu	Gly	Leu	Glu	Pro	Glu	Gly	Pro	Ile	Ser	Asp	Leu	Glu	Pro	Val	Glu
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<210> 5553

<211> 274

<212> DNA

<213> Homo sapiens

<400> 5553

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<210> 5554
<211> 90
<212> PRT
<213> Homo sapiens

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35 40 45
Gly Pro Ala Thr Ala Pro Ala Val Val Leu Ser His Tyr Arg Gly Cys
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Tyr Phe Pro Ser Gln Cys Pro Trp Gln Pro Trp Lys Pro Met Lys Gln
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<210> 5555
<211> 414
<212> DNA
<213> Homo sapiens

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414

<210> 5556
<211> 115
<212> PRT
<213> Homo sapiens

<400> 5556
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20 25 30
Glu Ser Gln Gly Cys Asp Ser Arg Arg Asp Ser Cys Glu Gly Pro Gly

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<210> 5558

<211> 360

<212> PRT

<213> Homo sapiens

<400> 5558

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		20						25					30		
Ser	Val	Pro	Arg	Glu	Pro	Ile	Asp	Arg	Lys	Arg	Leu	Lys	Lys	Asp	Val
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Glu	Pro	Ser	Cys	Ser	Gly	Ser	Ser	Leu	Gly	Pro	Asp	Lys	Gly	Leu	Ala
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Gln	Ser	Pro	Pro	Ser	Ser	Ser	Leu	Thr	Ala	Thr	Arg	Gln	Lys	Pro	Ser
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Gln	Ser	Pro	Ser	Ala	Pro	Pro	Ala	Asp	Val	Thr	Pro	Lys	Pro	Ala	Thr
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Glu	Ala	Val	Gln	Ser	Glu	His	Ser	Asp	Ala	Ser	Pro	Met	Ser	Ile	Asn
			100					105				110			
Glu	Val	Ile	Leu	Ser	Ala	Ser	Gly	Ala	Cys	Lys	Leu	Ile	Asp	Ser	Leu
		115					120					125			
His	Ser	Tyr	Cys	Phe	Ser	Ser	Arg	Gln	Asn	Lys	Ser	Gln	Val	Cys	Cys

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	165	170
Leu Asp Glu Leu Arg Arg Val Ser Val Pro Tyr Pro Ser Ser Leu Leu		175
	180	185
Ser Pro Ser Arg Glu Pro Pro Lys Met Asn Pro Val Val Glu Pro Leu		190
	195	200
Ser Trp Met Leu Gly Thr Trp Leu Ser Asp Pro Pro Gly Ala Gly Thr		205
	210	215
Tyr Pro Thr Leu Gln Pro Phe Gln Tyr Leu Glu Glu Val His Ile Ser		220
225	230	235
His Val Gly Gln Pro Met Leu Asn Phe Ser Phe Asn Ser Phe His Pro		240
	245	250
Asp Thr Arg Lys Pro Met His Arg Glu Cys Gly Phe Ile Arg Leu Lys		255
	260	265
Pro Asp Thr Asn Lys Val Ala Phe Val Ser Ala Gln Asn Thr Gly Val		270
	275	280
Val Glu Val Glu Glu Gly Glu Val Asn Gly Gln Glu Leu Cys Ile Ala		285
	290	295
Ser His Ser Ile Ala Arg Ile Ser Phe Ala Lys Glu Pro His Val Glu		300
305	310	315
Gln Ile Thr Arg Lys Phe Arg Leu Asn Ser Glu Gly Lys Leu Glu Gln		320
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<210> 5559

<211> 3866

<212> DNA

<213> Homo sapiens

<400> 5559

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2160

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 Ile Thr Asp Leu Val Lys Asn Thr Lys Gly Asn Thr Leu Lys Glu Asp
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 Gln Leu Asp Arg Thr Val Gly Arg Arg Asn Thr Phe Ile Gly Thr Pro
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 Thr Tyr Asp Tyr Arg Ser Asp Leu Trp Ser Cys Gly Ile Thr Ala Ile
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 Ala Leu Phe Leu Ile Pro Arg Asn Pro Pro Pro Arg Leu Lys Ser Lys
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 Lys Trp Ser Lys Lys Phe Ile Asp Phe Ile Asp Thr Cys Leu Ile Lys
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 Thr Tyr Met Gln Arg Pro Thr Thr Glu Gln Leu Leu Lys Phe Pro Phe
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 Ile Arg Asp Gln Pro Thr Glu Arg Gln Val Arg Ile Gln Leu Lys Asp
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 Tyr Glu Tyr Ser Gly Ser Glu Glu Glu Asp Asp Ser His Gly Glu Glu
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 Gly Glu Pro Ser Ser Ile Met Asn Val Pro Gly Glu Ser Thr Leu Arg

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Gln Lys Glu Gln Arg Arg Arg Leu Glu Glu Gln Gln Arg Arg Glu Arg
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Glu Ala Arg Arg Gln Gln Glu Arg Glu Gln Arg Arg Arg Glu Gln Glu
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Glu Arg Arg Arg Ala Glu Glu Glu Lys Arg Arg Val Glu Arg Glu Gln
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Arg Arg Pro His Pro Gln His Ser Gln Gln Pro Pro Pro Pro Gln Gln
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Glu Arg Ser Lys Pro Ser Phe His Ala Pro Glu Pro Lys Ala His Tyr
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Glu Pro Ala Asp Arg Ala Arg Glu Val Pro Val Arg Thr Thr Ser Arg
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Gln Asn Ser Gln Ala Gly Gln Arg Asn Ser Thr Ser Ser Ile Glu Pro
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Ser Lys Ser Glu Gly Ser Pro Ser Gln Arg Leu Glu Asn Ala Val Lys
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Asp Glu Ser Thr Ser Gly Pro Glu Asp Thr Arg Ala Ala Ser Ser Leu
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Asn Leu Ser Asn Gly Glu Thr Glu Ser Val Lys Thr Met Ile Val His
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Asp Asp Val Glu Ser Glu Pro Ala Met Thr Pro Ser Lys Glu Gly Thr
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Leu Ile Val Arg Gln Thr Gln Ser Ala Ser Ser Thr Leu Gln Lys His
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Lys Ser Ser Ser Ser Phe Thr Pro Phe Ile Asp Pro Arg Leu Leu Gln

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Gly Ser Val Val Asn Val Asn Pro Thr Asn Thr Arg Pro Gln Ser Asp				
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Thr Pro Glu Ile Arg Lys Tyr Lys Lys Arg Phe Asn Ser Glu Ile Leu				
	835		840	845
Cys Ala Ala Leu Trp Gly Val Asn Leu Leu Val Gly Thr Glu Ser Gly				
	850		855	860
Leu Met Leu Leu Asp Arg Ser Gly Gln Gly Lys Val Tyr Pro Leu Ile				
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Asn Arg Arg Arg Phe Gln Gln Met Asp Val Leu Glu Gly Leu Asn Val				
	885		890	895
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Ser Trp Leu Arg Asn Lys Ile Leu His Asn Asp Pro Glu Val Glu Lys				
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Ser Ser Val Glu Val Tyr Ala Trp Ala Pro Lys Pro Tyr His Lys Phe				
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Cys Ala Gly Phe His Ala Val Asp Val Asp Ser Gly Ser Val Tyr Asp				
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Ile Tyr Leu Pro Thr His Val Arg Lys Asn Pro His Ser Met Ile Gln				
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Tyr Gly Arg Ile Thr Lys Asp Val Val Leu Gln Trp Gly Glu Met Pro				
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Thr Ser Val Ala Tyr Ile Arg Ser Asn Gln Thr Met Gly Trp Gly Glu				
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Lys Ala Ile Glu Ile Arg Ser Val Glu Thr Gly His Leu Asp Gly Val				
1105		1110		1115
Phe Met His Lys Arg Ala Gln Arg Leu Lys Phe Leu Cys Glu Arg Asn				
	1125		1130	1135
Asp Lys Val Phe Phe Ala Ser Val Arg Ser Gly Gly Ser Ser Gln Val				
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<210> 5561

<211> 2089

<212> DNA

<213> Homo sapiens

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<211> 372

<212> PRT

<213> Homo sapiens

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<211> 683

<212> PRT

<213> Homo sapiens

<400> 5564

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Ser	Ala	Glu	Arg	Ala	Leu	Glu	Glu	Ala	Val	Ala	Thr	Gly	Thr	Leu	Asn
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Leu	Ser	Asn	Arg	Arg	Leu	Lys	His	Phe	Pro	Arg	Gly	Ala	Ala	Arg	Ser
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Tyr	Asp	Leu	Ser	Asp	Ile	Thr	Gln	Ala	Asp	Leu	Ser	Arg	Asn	Arg	Phe
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Pro	Glu	Val	Pro	Glu	Ala	Ala	Cys	Gln	Leu	Val	Ser	Leu	Glu	Gly	Leu
				85					90				95		
Ser	Leu	Tyr	His	Asn	Cys	Leu	Arg	Cys	Leu	Asn	Pro	Ala	Leu	Gly	Asn
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Leu	Thr	Ala	Leu	Thr	Tyr	Leu	Asn	Leu	Ser	Arg	Asn	Gln	Leu	Ser	Leu
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Leu	Pro	Pro	Tyr	Ile	Cys	Gln	Leu	Pro	Leu	Arg	Val	Leu	Ile	Val	Ser
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Gly	Thr	Val	Glu	Glu	Gln	Arg	Pro	Pro	Glu	Leu	Ser	Pro	Gly	Ala	Gly					
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Asp	Arg	Glu	Arg	Ala	Pro	Ser	Ser	Arg	Arg	Glu	Glu	Pro	Ala	Gly	Glu					
385					390					395					400					
Glu	Arg	Arg	Arg	Pro	Asp	Thr	Leu	Gln	Leu	Trp	Gln	Glu	Arg	Glu	Arg					
				405					410					415						
Arg	Gln	Gln	Gln	Gln	Ser	Gly	Ala	Trp	Gly	Ala	Pro	Arg	Lys	Asp	Ser					
				420				425					430							
Leu	Leu	Lys	Pro	Gly	Leu	Arg	Ala	Val	Val	Gly	Gly	Ala	Ala	Ala	Val					
		435					440					445								
Ser	Thr	Gln	Ala	Met	His	Asn	Gly	Ser	Pro	Lys	Ser	Ser	Ala	Ser	Gln					
		450				455						460								
Ala	Gly	Gly	Cys	Ser	Gly	Ala	Gly	Ser	Pro	Ala	Pro	Ala	Pro	Ala	Ser					
465					470					475					480					
Gln	Glu	Pro	Leu	Pro	Ile	Ala	Gly	Pro	Ala	Thr	Ala	Pro	Ala	Pro	Arg					
				485					490					495						
Pro	Leu	Gly	Ser	Ile	Gln	Arg	Pro	Asn	Ser	Phe	Leu	Phe	Arg	Ser	Ser					
			500					505					510							
Ser	Gln	Ser	Gly	Ser	Gly	Pro	Ser	Ser	Pro	Asp	Ser	Val	Leu	Arg	Pro					
		515					520					525								
Arg	Arg	Tyr	Pro	Gln	Val	Pro	Asp	Glu	Lys	Asp	Leu	Met	Thr	Gln	Leu					
		530				535						540								
Arg	Gln	Val	Leu	Glu	Ser	Arg	Leu	Gln	Arg	Pro	Leu	Pro	Glu	Asp	Leu					
545					550					555					560					
Ala	Glu	Ala	Leu	Ala	Ser	Gly	Val	Ile	Leu	Cys	Gln	Leu	Ala	Asn	Gln					
				565					570					575						
Leu	Arg	Pro	Arg	Ser	Val	Pro	Phe	Ile	His	Val	Pro	Ser	Pro	Ala	Val					
			580					585					590							
Pro	Lys	Leu	Ser	Ala	Leu	Lys	Ala	Arg	Lys	Asn	Val	Glu	Ser	Phe	Leu					
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<210> 5565
 <211> 472
 <212> DNA
 <213> Homo sapiens

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 180
 acttaaactc cagtgccag tcctatgcaa tcagatcctg ggtctccact gtgcagcgcc
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 cgtggagagc cagcgatgtg gagggtcgag atcacccagt tctttgggga cagggcttca
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 ctgcccccaa ggctggagtc cgggtgtgca atcacggctc acagcagtct cgacctccag
 360
 ggctcaagcg atcctccagc ctcagcctcc cgagcagctg ggagcacagg cgcataccac
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<210> 5566
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 5566
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 Leu Asp Leu Gln Gly Ser Ser Asp Pro Pro Ala Ser Ala Ser Arg Ala
 50 55 60
 Ala Gly Ser Thr Gly Ala Tyr His Ala Trp Leu Phe
 65 70 75

<210> 5567
 <211> 968
 <212> DNA
 <213> Homo sapiens

<400> 5567
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 120
 taaaaaacat ttttagctca caagctgtac aaaaacagac ggtgagtaaa ttggcccaca
 180
 gaccggtttg ctageccctg ggcttaagag atctgtccac ttactcctca acatgcagag
 240

tgtgaactgt gtgaactgca taggccacag caatcttact gcatccattc ccgctgcac
 300
 attatTTTTg atttgtattc attcagtcca ccgaagcatt cacttggcac ctctccaaat
 360
 ctgggtactg tgcaagatcc ttccttggga cactgaagga aaatcagaca cggcccttct
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 acaatcctgg aggccagatg tctgaaatca agatattggt aggggttggt ccttctcgag
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 720
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 780
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 840
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 968

<210> 5568
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 5568
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 20 25 30
 His Arg Ser Ile His Leu Ala Pro Leu Gln Ile Trp Val Leu Cys Lys
 35 40 45
 Ile Leu Pro Trp Asp Thr Glu Gly Lys Ser Asp Thr Ala Leu Leu Ser
 50 55 60
 Ser Ser Gln Thr Leu Arg Tyr Pro Asp Thr Thr Ala Leu Ile Val Ser
 65 70 75 80
 Glu Asn Thr Ala Thr Ser Ala Gly Lys Tyr Gln Arg Cys Phe Thr Arg
 85 90 95
 Tyr Met Tyr Gln Ile Leu Lys Ala Ala Val Pro Lys Tyr His Lys Leu
 100 105 110
 His Gly Leu Lys Gln Gln Lys Phe Ile Pro Ser Gln Ser Trp Arg Pro
 115 120 125
 Asp Val
 130

<210> 5569
 <211> 876

<212> DNA

<213> Homo sapiens

<400> 5569

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120
ttgcataacc ccgggggacc cccttcctct ttgtgatgcc ccagaacaat attgatttga
180
ttatagaaag ccaccggcag cctacatgcg caacgggtgag ttgttggtta tatacactgt
240
ggaccataca gtggaatatt acagtcaata aaagggtatth ttagagagaa aaaaaaacat
300
tggaacacgc ttatgatata atgttaggca aaatcgctgt tatgaacagc tcgtttgggg
360
cagagcaaat cctgggaagt aacgctgagg ctgttggtgc aggcggtgga gtacaacatc
420
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480
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720
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780
caggagcaa ttccagcatg gaagtcccca tcatgctcct gctggcaggt acagggtgcc
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<210> 5570

<211> 169

<212> PRT

<213> Homo sapiens

<400> 5570

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20          25          30
Gly Ser Pro Leu Val Val Ile Ser Gln Gly Lys Ile Val Phe Glu Asp
35          40          45
Gly Asn Ile Asn Val Asn Lys Gly Met Gly Arg Phe Ile Pro Arg Lys
50          55          60
Ala Phe Pro Glu His Ser Ser Thr Trp Leu Glu Leu His Asn His Gly
65          70          75          80
Arg Arg His Val Cys Glu Ala Ser Trp Gly Cys Thr Ala Asp Pro Leu
85          90          95
Leu Ser Pro Leu Ala Leu Ser Ala Ala Phe Met Trp Leu Ser Pro Ser

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	100		105		110										
Val	Leu	Gln	Ala	Phe	Ile	Ser	Phe	Arg	Ala	Ala	Pro	Ser	Leu	Cys	Pro
	115		120		125										
Gly	Thr	Leu	Ala	Lys	Met	Gln	Cys	Leu	Pro	Asn	Ser	His	Ile	Ser	Phe
	130		135		140										
Asn	Gln	Gly	Ala	Ile	Pro	Ala	Trp	Lys	Ser	Pro	Ser	Cys	Ser	Cys	Trp
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Gln	Val	Gln	Val	Pro	Val	Cys	Asp	Gly							
			165												

<210> 5571

<211> 405

<212> DNA

<213> Homo sapiens

<400> 5571

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180
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240
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300
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<210> 5572

<211> 135

<212> PRT

<213> Homo sapiens

<400> 5572

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			20					25					30		
Gln	Leu	Arg	Asp	Pro	Thr	Ser	Pro	Lys	Phe	Pro	Glu	Asp	Phe	Asp	Asp
	35						40				45				
Gly	Glu	His	Ala	Lys	Gln	Lys	Ser	Val	Ile	Ser	Trp	Leu	Leu	Asn	His
	50					55				60					
Asp	Pro	Ala	Lys	Arg	Pro	Thr	Ala	Thr	Glu	Leu	Leu	Lys	Ser	Glu	Leu
65				70					75					80	
Leu	Pro	Pro	Pro	Gln	Met	Glu	Glu	Ser	Glu	Leu	His	Glu	Val	Leu	His
			85				90					95			
His	Thr	Leu	Thr	Asn	Val	Asp	Gly	Lys	Ala	Tyr	Arg	Thr	Met	Met	Ala
			100				105					110			
Gln	Ile	Phe	Ser	Gln	Arg	Leu	Ala	Gly	Ala	Gly	Gly	Gly	Gly	Tyr	Arg
	115					120					125				
Ser	Arg	Leu	Gly	Val	Pro	Arg									

130

135

<210> 5573

<211> 1279

<212> DNA

<213> Homo sapiens

<400> 5573

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120
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240
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360
gaagactggt gcagggggat ggacatgaac cctcggaaaag cgctattgat tgccggcatc
420
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600
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780
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900
catactactc agatgataaa ggcgtggcag gtgccagatg tagagaagag aaggcgattg
960
ctagagagcc ttcgaggccc agcacttgat gttattcgtg tcctcaagat aaacaatcct
1020
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1080
cctagggagt tgcaggtcaa atatctaacc acttaccaga aggatgagga aaagttgtcg
1140
gcttatgtac taaggctgga gcctttgtta cagaagctgg tacagagagg agcaattgag
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1279

<210> 5574

<211> 312
 <212> PRT
 <213> Homo sapiens

<400> 5574

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Ala Glu Ile Glu Glu Ala Leu Gln Ala Gly Leu Ala Pro Leu Gly Glu
      35           40           45
Tyr Arg Leu Leu Gly Arg Met Phe Arg Arg Asp Glu Asn Arg Lys Val
      50           55           60
Ala Leu Val Gly Leu Thr Ala Glu Thr Ser His Ala Leu Val Pro Lys
      65           70           75           80
Glu Ile Pro Gly Lys Gly Gly Ile Trp Arg Val Ile Phe Lys Pro Pro
      85           90           95
Asp Pro Asp Asn Thr Phe Leu Ser Arg Leu Asn Glu Phe Leu Ala Gly
      100          105          110
Glu Gly Met Thr Val Gly Glu Leu Ser Arg Ala Leu Gly His Glu Asn
      115          120          125
Gly Ser Leu Asp Pro Glu Gln Gly Met Ile Pro Glu Met Trp Ala Pro
      130          135          140
Met Leu Ala Gln Ala Leu Glu Ala Leu Gln Pro Ala Leu Gln Cys Leu
      145          150          155          160
Lys Tyr Lys Lys Leu Arg Val Phe Ser Gly Arg Glu Ser Pro Glu Pro
      165          170          175
Gly Glu Glu Glu Phe Gly Arg Trp Met Phe His Thr Thr Gln Met Ile
      180          185          190
Lys Ala Trp Gln Val Pro Asp Val Glu Lys Arg Arg Arg Leu Leu Glu
      195          200          205
Ser Leu Arg Gly Pro Ala Leu Asp Val Ile Arg Val Leu Lys Ile Asn
      210          215          220
Asn Pro Leu Ile Thr Val Asp Glu Cys Leu Gln Ala Leu Glu Glu Val
      225          230          235          240
Phe Gly Val Thr Asp Asn Pro Arg Glu Leu Gln Val Lys Tyr Leu Thr
      245          250          255
Thr Tyr Gln Lys Asp Glu Glu Lys Leu Ser Ala Tyr Val Leu Arg Leu
      260          265          270
Glu Pro Leu Leu Gln Lys Leu Val Gln Arg Gly Ala Ile Glu Arg Asp
      275          280          285
Ala Val Asn Gln Ala Arg Leu Asp Gln Val Ile Ala Gly Ala Val His
      290          295          300
Lys Thr Ile Arg Arg Glu Leu Asn
      305          310

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<210> 5575
 <211> 2405
 <212> DNA
 <213> Homo sapiens

<400> 5575

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<210> 5576

<211> 367

<212> PRT

<213> Homo sapiens

<400> 5576

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			20					25					30		
Gln	Ala	Leu	Thr	Gly	Asn	Glu	Gly	Arg	Val	Ser	Val	Glu	Asn	Ile	Lys
		35				40						45			
Gln	Leu	Leu	Gln	Cys	Leu	Val	Pro	Gly	Ser	Thr	Thr	Leu	His	Ser	Ala
	50				55						60				
Glu	Ile	Leu	Ala	Glu	Ile	Ala	Arg	Ile	Leu	Arg	Pro	Gly	Gly	Cys	Leu
65				70				75						80	
Phe	Leu	Lys	Glu	Pro	Val	Glu	Thr	Ala	Val	Asp	Asn	Asn	Ser	Lys	Val
			85					90						95	
Lys	Thr	Ala	Ser	Lys	Leu	Cys	Ser	Ala	Leu	Thr	Leu	Ser	Gly	Leu	Val
		100						105					110		
Glu	Val	Lys	Glu	Leu	Gln	Arg	Glu	Pro	Leu	Thr	Pro	Glu	Glu	Val	Gln
		115				120						125			
Ser	Val	Arg	Glu	His	Leu	Gly	His	Glu	Ser	Asp	Asn	Leu	Leu	Phe	Val
		130				135					140				
Gln	Ile	Thr	Gly	Lys	Lys	Pro	Asn	Phe	Glu	Val	Gly	Ser	Ser	Arg	Gln
145				150					155					160	
Leu	Lys	Leu	Ser	Ile	Thr	Lys	Lys	Ser	Ser	Pro	Ser	Val	Lys	Pro	Ala

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<210> 5577
<211> 659
<212> DNA
<213> Homo sapiens
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4760

<210> 5578
 <211> 166
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Leu Thr Gly Lys Asp Cys Pro His Val Arg Glu Lys Gly Ser Gly Lys
 50 55 60
 Gln Asn Lys Asp Leu Tyr Glu Leu Ala Phe Ser Ile Ser Tyr Asp Arg
 65 70 75 80
 Gly Glu Glu Glu Ala Tyr Leu Asn Phe Ile Ala Pro Ser Lys Arg Glu
 85 90 95
 Phe Tyr Leu Trp Thr Asp Gly Leu Ser Ala Leu Leu Gly Ser Pro Met
 100 105 110
 Gly Ser Glu Gln Thr Arg Leu Asp Leu Glu Gln Leu Leu Thr Met Glu
 115 120 125
 Thr Lys Leu Arg Leu Leu Glu Leu Glu Asn Val Pro Ile Pro Glu Arg
 130 135 140
 Pro Pro Pro Val Pro Pro Pro Pro Thr Asn Phe Asn Phe Cys Tyr Asp
 145 150 155 160
 Cys Ser Ile Ala Glu Pro
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<210> 5579
 <211> 1312
 <212> DNA
 <213> Homo sapiens

<400> 5579
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 180
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<210> 5580

<211> 283

<212> PRT

<213> Homo sapiens

<400> 5580

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		20						25					30		
Ser	Gly	Pro	Ser	Gln	Thr	Thr	Ile	His	Leu	Leu	Pro	Thr	Ala	Pro	Thr
	35						40					45			
Thr	Val	Asn	Val	Thr	His	Arg	Pro	Val	Thr	Gln	Val	Thr	Thr	Arg	Leu
	50					55					60				
Pro	Val	Pro	Arg	Ala	Pro	Ala	Asn	His	Gln	Val	Val	Tyr	Thr	Thr	Leu
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Pro	Ala	Pro	Pro	Ala	Gln	Ala	Pro	Leu	Arg	Gly	Thr	Val	Met	Gln	Ala
				85					90					95	
Pro	Ala	Val	Arg	Gln	Val	Asn	Pro	Gln	Asn	Ser	Val	Thr	Val	Arg	Val
		100						105					110		
Pro	Gln	Thr	Thr	Thr	Tyr	Val	Val	Asn	Asn	Gly	Leu	Thr	Leu	Gly	Ser
	115						120					125			
Thr	Gly	Pro	Gln	Leu	Thr	Val	His	His	Arg	Pro	Pro	Gln	Val	His	Thr
	130					135					140				
Glu	Pro	Pro	Arg	Pro	Val	His	Pro	Ala	Pro	Leu	Pro	Glu	Ala	Pro	Gln
145					150					155				160	
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      1           5           10           15
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Pro Ser Ser Lys Asn Leu Trp Glu Gln Ile Cys Lys Glu Tyr Glu Ala
      50           55           60
Glu Gln Pro Pro Phe Pro Glu Gly Tyr Lys Val Lys Gln Glu Pro Val
      65           70           75           80
Ile Thr Val Ala Pro Val Glu Glu Met Leu Phe His Gly Phe Ser Ala
      85           90           95
Glu His Tyr Phe Pro Val Ser His Phe Thr Met Ile Ser Arg Thr Pro
      100          105          110
Cys Pro Gln Asp Lys Ser Glu Thr Ile Asn Pro Lys Thr Cys Ser Pro
      115          120          125
Lys Glu Tyr Leu Glu Thr Phe Ile Phe Pro Val Leu Leu Pro Gly Met
      130          135          140
Ala Ser Leu Leu His Gln Ala Lys Lys Glu Lys Cys Phe Glu Val Ser
      145          150          155          160
Cys Leu Ala Gly Phe Leu Tyr Phe Glu Ile Leu Asn His Ser Leu Leu
      165          170          175
Ser Asp Asp Ser Ser Leu Ser Trp Tyr His Gln Val Val Leu Gln Met
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Ser His Thr Ile
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<210> 5583

<211> 2101

<212> DNA

<213> Homo sapiens

<400> 5583

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<210> 5584

<211> 454

<212> PRT

<213> Homo sapiens

<400> 5584

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      20           25           30
Glu Arg Val Ala Ala Leu Gln Thr Val Gly Pro Thr Ala Gly Pro Ala
      35           40           45
Pro Asn Ala Phe Thr Ser Thr Leu Glu Lys Val Gly Asp His Gln Phe
      50           55           60
Leu Leu Tyr Ser Gly Arg Ser Pro Pro Thr Pro Thr Gly Leu Val His
      65           70           75           80
Leu Val Val Val Ala Ala Lys Lys Leu Val Asn Arg Leu Gln Val Ala
      85           90           95
Pro Lys Thr Gln Leu Asp Glu Thr Val Leu Trp Val Val His Val Ser
      100          105          110
Gly Pro Ile Asn Pro Gln Val Leu Lys Ser Lys Ala Ala Lys Glu Leu
      115          120          125
Lys Ala Leu Gln Asp Leu Ala Arg Lys Glu Met Leu Glu Leu Leu Asp
      130          135          140
Met Pro Ala Ala Glu Leu Leu Gln Asp His Gln Leu Leu Trp Ala Gln
      145          150          155          160
Leu Phe Ser Pro Gly Val Glu Met Lys Lys Ile Thr Asp Thr His Thr
      165          170          175
Pro Ser Gly Leu Thr Val Asn Leu Thr Leu Tyr Tyr Met Leu Ser Cys
      180          185          190
Ser Pro Ala Pro Leu Leu Ser Pro Ser Leu Ser His Arg Glu Arg Asp
      195          200          205
Gln Met Glu Ser Thr Leu Asn Tyr Glu Asp His Cys Phe Ser Gly His
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Ala Thr Met His Ala Glu Asn Leu Trp Pro Gly Arg Leu Ser Ser Val
      225          230          235          240
Gln Gln Ile Leu Gln Leu Ser Asp Leu Trp Arg Leu Thr Leu Gln Lys
      245          250          255
Arg Gly Cys Lys Gly Leu Val Lys Val Gly Ala Pro Gly Ile Leu Gln
      260          265          270
Gly Met Val Leu Ser Phe Gly Gly Leu Gln Phe Thr Glu Asn His Leu
      275          280          285
Gln Phe Gln Ala Asp Pro Asp Val Leu His Asn Ser Tyr Ala Leu His
      290          295          300
Gly Ile Arg Tyr Lys Asn Asp His Ile Asn Leu Ala Val Leu Arg Met
      305          310          315          320
Pro Arg Ala Ser Pro Thr Tyr Thr Cys Pro Trp Ser Pro Val Ala Ser
      325          330          335
Leu Ser Xaa Ile Tyr Ala Cys Lys Ala Gly Cys Leu Asp Glu Pro Val
      340          345          350
Glu Leu Thr Ser Ala Pro Thr Gly His Thr Phe Ser Val Met Val Thr
      355          360          365
Gln Pro Ile Thr Pro Leu Leu Tyr Ile Ser Thr Asp Leu Thr His Leu
      370          375          380
Gln Asp Leu Arg His Thr Leu His Leu Lys Ala Ile Leu Ala His Asp

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385          390          395          400
Glu His Met Ala Gln Asp Pro Gly Leu Pro Phe Leu Phe Trp Phe
          405          410          415
Ser Val Ala Ser Leu Ile Thr Leu Phe His Leu Phe Leu Phe Lys Leu
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Ile Tyr Asn Glu Tyr Cys Gly Pro Gly Ala Lys Pro Leu Phe Arg Ser
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Lys Glu Asp Pro Ser Val
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<210> 5585
<211> 740
<212> DNA
<213> Homo sapiens

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<210> 5586
<211> 87
<212> PRT
<213> Homo sapiens

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<400> 5586
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Gln Phe Pro Gly Ala Lys Gln Pro Ser Ser Pro Gln Tyr Leu Ser His
          20          25          30
Leu Lys Arg Ser Cys Pro Thr Tyr Leu Ser Pro Pro Gln Pro Lys Asp

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<400> 5588
Met Ala Pro Glu His Glu Ile Pro Lys Ile Gly Trp Tyr Ser Arg Phe
  1                      5                      10                      15
Ala Arg His Pro Phe Tyr Gly Ser Ala Gly Val Asn Ser Gly Val Met

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Leu	Met	Asn	Leu	Thr	Arg	Ile	Arg	Ser	Thr	Gln	Phe	Lys	Asn	Ser	Met
		35					40					45			
Ile	Pro	Thr	Gly	Leu	Ala	Trp	Glu	Asp	Met	Leu	Tyr	Pro	Leu	Tyr	Gln
		50				55					60				
Lys	Tyr	Lys	Asn	Ala	Ile	Thr	Trp	Gly	Asp	Gln	Asp	Leu	Leu	Asn	Ile
65					70					75				80	
Ile	Phe	Tyr	Phe	Asn	Pro	Glu	Cys	Leu	Tyr	Val	Phe	Pro	Cys	Gln	Trp
				85					90					95	
Asn	Tyr	Arg	Pro	Asp	His	Cys	Met	Tyr	Gly	Ser	Asn	Cys	Arg	Glu	Ala
			100					105					110		
Glu	His	Glu	Gly	Val	Ser	Val	Leu	His	Gly	Asn	Arg	Gly	Val	Tyr	His
			115				120					125			
Asp	Asp	Lys	Gln	Pro	Thr	Phe	Arg	Ala	Leu	Tyr	Glu	Ala	Ile	Arg	Asp
						135					140				
Phe	Pro	Phe	Gln	Asp	Asn	Leu	Phe	Gln	Ser	Met	Tyr	Tyr	Pro	Leu	Gln
145					150					155				160	
Leu	Lys	Phe	Leu	Glu	Thr	Val	His	Thr	Leu	Cys	Gly	Arg	Ile	Pro	Gln
				165					170					175	
Val	Phe	Leu	Lys	Gln	Ile	Glu	Lys	Thr	Met	Lys	Arg	Ala	Tyr	Glu	Lys
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<210> 5589

<211> 1327

<212> DNA

<213> Homo sapiens

<400> 5589

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720

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<210> 5590

<211> 207

<212> PRT

<213> Homo sapiens

<400> 5590

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			20					25					30		
Glu	Glu	Gln	Glu	Glu	Arg	Lys	Pro	Ser	Ala	Thr	Gln	Gln	Lys	Lys	Asn
			35				40					45			
Thr	Lys	Leu	Ser	Ser	Lys	Thr	Thr	Ala	Lys	Leu	Ser	Thr	Ser	Ala	Lys
			50				55				60				
Arg	Ile	Gln	Lys	Glu	Leu	Ala	Glu	Ile	Thr	Leu	Asp	Pro	Pro	Pro	Asn
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Cys	Ser	Ala	Gly	Pro	Lys	Gly	Asp	Asn	Ile	Tyr	Glu	Trp	Arg	Ser	Thr
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Ile	Leu	Gly	Pro	Pro	Gly	Ser	Val	Tyr	Glu	Gly	Gly	Val	Phe	Phe	Leu
			100					105					110		
Asp	Ile	Thr	Phe	Ser	Ser	Asp	Tyr	Pro	Phe	Lys	Pro	Pro	Lys	Val	Thr
			115				120					125			
Phe	Arg	Thr	Arg	Ile	Tyr	His	Cys	Asn	Ile	Asn	Ser	Gln	Gly	Val	Ile
			130				135					140			
Cys	Leu	Asp	Ile	Leu	Lys	Asp	Asn	Trp	Ser	Pro	Ala	Leu	Thr	Ile	Ser
145					150					155					160
Lys	Val	Leu	Leu	Ser	Ile	Cys	Ser	Leu	Leu	Thr	Asp	Cys	Asn	Pro	Ala
				165						170				175	
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 <212> DNA
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<210> 5592

<211> 580

<212> PRT

<213> Homo sapiens

<400> 5592

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<210> 5593

<211> 3078

<212> DNA

<213> Homo sapiens

<400> 5593

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<210> 5594
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 Thr Arg Leu Asn Asp Pro Lys Met Ser Glu Thr Glu Arg Gln Ser Met
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 Glu Ser Glu Arg Ala Asp Arg Ser Leu Phe Val Gln Glu Leu Leu Leu
 225 230 235 240
 Ser Thr Leu Val Arg Glu Glu Ser Ser Ser Asp Glu Asp Asp Arg
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 Gly Glu Met Ala Asp Phe Gly Ala Met Gly Cys Val Asp Ile Met Pro
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<210> 5596
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<400> 5596
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 Met Arg Val Glu Lys Phe Ile Tyr Glu Asn His Pro Asp Val Phe Ser
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 Asp Ser Ser Met Asp His Phe Gln Lys Phe Leu Pro Thr Val Gly Gly
 85 90 95
 Gln Leu Gly Thr Ala Gly Gln Gly Phe Ser Tyr Ser Lys Ser Asn Gly
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 Arg Gly Gly Ser Gln Ala Gly Gly Ser Gly Ser Ala Gly Gln Tyr Gly
 115 120 125
 Ser Asp Gln Gln His His Leu Gly Ser Gly Ser Gly Ala Gly Gly Thr
 130 135 140
 Gly Gly Pro Ala Gly Gln Ala Gly Arg Gly Gly Ala Ala Gly Thr Ala
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 Gly Val Gly Glu Thr Gly Ser Gly Asp Gln Ala Gly Gly Glu Gly Lys
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 180 185 190
 Gly Val Asp Pro Gln Gln Lys Met Glu Leu Gly Ile Asp Leu Leu Ala
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 Tyr Gly Ala Lys Ala Glu Leu Pro Lys Tyr Lys Ser Phe Asn Arg Thr
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 Ala Met Pro Tyr Gly Gly Tyr Glu Lys Ala Ser Lys Arg Met Thr Phe
 225 230 235 240
 Gln Met Pro Lys Phe Asp Leu Gly Pro Leu Leu Ser Glu Pro Leu Val
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<210> 5597
 <211> 2240
 <212> DNA
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<400> 5597
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<211> 312

<212> PRT

<213> Homo sapiens

<400> 5598

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<210> 5599

<211> 4492

<212> DNA

<213> Homo sapiens

<400> 5599

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<211> 923

<212> PRT

<213> Homo sapiens

<400> 5600

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			20					25					30		
Ala	Tyr	Val	Arg	Val	Leu	Asp	Leu	His	Lys	Lys	Pro	Phe	Leu	Ala	Lys
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Tyr	Phe	Pro	Phe	Met	Asp	Leu	Lys	Leu	Arg	Ala	Ala	Ser	Pro	Ile	Ile
	50					55					60				
Thr	Leu	Val	Ala	Leu	Asp	Glu	Ala	Leu	Asp	Asn	Tyr	Thr	Ile	Thr	Phe
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Thr	Asn	Lys	Ala	Gly	Gln	Arg	Ile	Asn	Ser	Ala	Pro	Gln	Gln	Ile	Glu
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Val	Phe	Pro	Pro	Phe	Arg	Leu	Met	Pro	Arg	Lys	Val	Thr	Leu	Leu	Ile
		115					120						125		
Gly	Ala	Thr	Met	Gln	Val	Thr	Ser	Glu	Gly	Gly	Pro	Gln	Pro	Gln	Ser
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Asn	Ile	Leu	Phe	Ser	Ile	Ser	Asn	Glu	Ser	Val	Ala	Leu	Val	Ser	Ala
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Ala	Gly	Leu	Val	Gln	Gly	Leu	Ala	Ile	Gly	Asn	Gly	Thr	Val	Ser	Gly
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Asp	Leu	Arg	Gly	Arg	His	His	Glu	Ala	Ser	Ile	Arg	Leu	Pro	Ser	Gln
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Tyr	Asn	Phe	Ala	Met	Asn	Val	Leu	Gly	Arg	Val	Lys	Gly	Arg	Thr	Gly
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Leu	Arg	Val	Val	Val	Lys	Ala	Val	Asp	Pro	Thr	Ser	Gly	Gln	Leu	Tyr
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Gly	Leu	Ala	Arg	Glu	Leu	Ser	Asp	Glu	Ile	Gln	Val	Gln	Val	Phe	Glu

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His Val Asp Glu Lys Gly Phe Leu Ala Ser Gly Ser Met Ile Gly Thr
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Ser Thr Ile Glu Val Ile Ala Gln Glu Pro Phe Gly Ala Asn Gln Thr
385          390          395          400
Ile Ile Val Ala Val Lys Val Ser Pro Val Ser Tyr Leu Arg Val Ser
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Pro Leu Gly Met Thr Val Thr Phe Thr Val His Phe His Asp Asn Ser
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Gly Asp Val Phe His Ala His Ser Ser Val Leu Asn Phe Ala Thr Asn
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Arg Asp Asp Phe Val Gln Ile Gly Lys Gly Pro Thr Asn Asn Thr Cys
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Val Val Arg Thr Val Ser Val Gly Leu Thr Leu Leu Arg Val Trp Asp
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Ala Glu His Pro Gly Leu Ser Asp Phe Met Pro Leu Pro Val Leu Gln
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Cys Leu Ala Thr Val Leu Thr Ser Leu Glu Gly Leu Ser Gly Thr Trp
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Ser Ser Ser Ala Asn Ser Ile Leu His Ile Asp Pro Lys Thr Gly Val
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Ala Val Ala Arg Ala Val Gly Ser Val Thr Val Tyr Tyr Glu Val Ala
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Gly His Leu Arg Thr Tyr Lys Glu Val Val Val Ser Val Pro Gln Arg
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Ile Met Ala Arg His Leu His Pro Ile Gln Thr Ser Phe Gln Glu Ala
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Thr Ala Ser Lys Val Ile Val Ala Val Gly Asp Arg Ser Ser Asn Leu
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Arg Gly Glu Cys Thr Pro Thr Gln Arg Glu Val Ile Gln Ala Leu His
625          630          635          640
Pro Glu Thr Leu Ile Ser Cys Gln Ser Gln Phe Lys Pro Ala Val Phe
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Asp Phe Pro Ser Gln Asp Val Phe Thr Val Glu Pro Gln Phe Asp Thr
          660          665          670
Ala Leu Gly Gln Tyr Phe Cys Ser Ile Thr Met His Arg Leu Thr Asp
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Lys Gln Arg Lys His Leu Ser Met Lys Lys Thr Ala Leu Val Val Ser
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Ala Ser Leu Ser Ser Ser His Phe Ser Thr Glu Gln Val Gly Ala Glu
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<212> DNA
<213> Homo sapiens
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<210> 5602
 <211> 213
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Gly Gly Val Ile Glu Glu Leu Ser Cys Val Arg Ser Asn Asn Tyr Val
 50 55 60
 Gln Glu Pro Glu Cys Arg Arg Asn Leu Val Gln Cys Leu Leu Glu Lys
 65 70 75 80
 Gln Gly Thr Pro Val Val Gln Gly Ser Leu Glu Leu Glu Arg Val Met
 85 90 95
 Ser Ser Leu Leu Asp Met Gly Phe Ser Asn Ala His Ile Asn Glu Leu
 100 105 110
 Leu Ser Val Arg Arg Gly Ala Ser Leu Gln Gln Leu Leu Asp Ile Ile
 115 120 125
 Ser Glu Phe Ile Leu Leu Gly Leu Asn Pro Glu Pro Val Cys Val Val
 130 135 140
 Leu Lys Lys Ser Pro Gln Leu Leu Lys Leu Pro Ile Met Gln Met Arg
 145 150 155 160
 Lys Arg Ser Ser Tyr Leu Gln Lys Leu Gly Leu Gly Glu Gly Lys Leu
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 Lys Arg Val Leu Tyr Cys Cys Pro Glu Ile Phe Thr Met Arg Gln Gln
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 Val Pro Leu His Ala
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 <212> DNA
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 <211> 560
 <212> PRT
 <213> Homo sapiens

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 His Val Cys Arg Pro Pro Gly Asn Val Ser Gln Val Val Phe His Asn
 35 40 45
 His Ser Asn Trp Ser Leu Glu Asp Thr Gly Ala Leu Leu Ser Ser Gly
 50 55 60
 Gln Lys Asp Tyr Val Thr Val Gln Leu Gln Asn Gly Glu Ile Trp Glu
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 Leu Ser Arg Cys Ser Arg Asn Lys Arg Glu Asn Thr Ser Ser Leu Gly
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 Tyr Glu Tyr Thr Gly Ser Lys Lys Glu Phe Pro Cys Val Asp Gly Tyr
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 Ile Tyr Asp Gln Asn Thr Trp Lys Ser Thr Ala Val Thr Gln Trp Asn
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 145 150 155 160
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 195 200 205
 Gly Phe Val Tyr Val Met Glu Phe Ile Gly Met Lys Ser Arg Thr Trp
 210 215 220
 Ala Ser Val His Leu His Ser Phe Phe Ala Val Gly Thr Leu Leu Val
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 Glu Thr Pro Phe Trp Leu Leu Ser Glu Gly Arg Tyr Glu Glu Ala Gln
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 290 295 300
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 305 310 315 320
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 325 330 335
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 370 375 380
 Tyr Thr Phe Val Cys Ile Ala Met Asp Lys Val Gly Arg Arg Thr Val
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 420 425 430
 Gly Lys Phe Ala Ile Gly Ala Ala Phe Gly Leu Ile Tyr Leu Tyr Thr
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 Ala Glu Leu Tyr Pro Thr Ile Val Arg Ser Leu Ala Val Gly Ser Gly
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<212> DNA

<213> Homo sapiens

<400> 5605

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<210> 5606

<211> 101

<212> PRT

<213> Homo sapiens

<400> 5606

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Leu Phe Pro Ser Ser Glu Cys Gly Trp Phe Ser Leu Leu Leu Ser Ser
      35             40             45
Asp Val Pro Ser Ser Ser Leu Glu Arg Pro Pro Trp Met Thr Glu Glu
      50             55             60
Val Thr Thr Thr Ser Ser Arg Ser Thr Pro Arg Pro Ser Val Ser Pro
      65             70             75             80
Ser Gln Cys Leu Ala Pro Ser Asn Ile Ala Phe Cys Val Tyr His Gln
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Phe Pro Phe Thr Arg
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<210> 5607

<211> 320

<212> DNA

<213> Homo sapiens

<400> 5607

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<210> 5608

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5608

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      20             25             30
Ile His Ala Val Val Leu Pro Arg Gly Lys Ser Leu Asp Gln Cys Val
      35             40             45
Glu Thr Leu Gln Lys Gln Thr Arg Val Gly Lys Ala Gly Thr Asn Lys
      50             55             60
Pro Pro Arg Cys Arg Gly Arg Gly Ala Arg Pro Gly Gly Arg Pro Ala
      65             70             75             80
Pro Arg Asn Val Phe Asp Phe Leu Asn Glu Lys Leu Gln Gly Gln Ala
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100

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<210> 5609

<211> 1843

<212> DNA

<213> Homo sapiens

<400> 5609

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720
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<210> 5610

<211> 153

<212> PRT

<213> Homo sapiens

<400> 5610

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			20					25					30		
Phe	Thr	Gly	Gly	Arg	Gln	Asp	His	Thr	Ser	Leu	Pro	His	Trp	Ala	Cys
		35				40					45				
Leu	Leu	Val	Asp	Ser	Cys	Met	Gln	Glu	Ala	Val	Met	Gly	Ser	Leu	Arg
	50				55					60					
Ile	Pro	Gln	Cys	Gly	Asn	Gly	Pro	Leu	Arg	Leu	Val	Leu	Arg	Val	Pro
65				70					75					80	
Gly	Ala	Gln	Ser	Trp	Val	Gly	Gly	Cys	Trp	Trp	Glu	Val	Arg	Asn	Lys
			85					90					95		
Phe	Trp	Leu	Pro	Ser	Gly	Gln	Leu	Pro	Thr	Ala	Leu	Thr	Trp	Glu	Val
			100					105					110		
Asp	Ala	His	Arg	Gln	Asp	Ala	Leu	Gly	Tyr	Cys	Cys	Thr	Val	Leu	His
		115				120						125			
Glu	Ile	Phe	Ile	Gln	Pro	Thr	Arg	Phe	Asn	Arg	Ser	Leu	Gly	Ser	Ser
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<210> 5611

<211> 1152

<212> DNA

<213> Homo sapiens

<400> 5611

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<210> 5612

<211> 289

<212> PRT

<213> Homo sapiens

<400> 5612

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Pro	Trp	Ala	Val	Gln	Ala	Val	Glu	His	Glu	Glu	Val	Ala	Gln	Arg	Val
			20					25					30		
Ile	Lys	Leu	His	Arg	Gly	Arg	Gly	Val	Ala	Ala	Met	Gln	Ser	Arg	Gln
			35				40					45			
Trp	Val	Arg	Asp	Ser	Cys	Arg	Lys	Leu	Ser	Gly	Leu	Leu	Arg	Gln	Lys
	50					55					60				
Asn	Ala	Val	Leu	Asn	Lys	Lys	Lys	Thr	Ala	Ile	Gly	Ala	Val	Glu	Lys
65					70					75				80	
Asp	Val	Gly	Leu	Ser	Asp	Glu	Glu	Lys	Leu	Phe	Gln	Val	His	Thr	Phe

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 720
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<210> 5614

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5614

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Ser	Leu	Ala	Ala	Ala	Ala	Glu	Leu	Ala	Ala	Gln	Lys	Arg	Glu	Gln	Arg
			20						25					30	
Leu	Arg	Lys	Phe	Arg	Glu	Leu	His	Leu	Met	Arg	Asn	Glu	Ala	Arg	Lys
			35				40					45			
Leu	Asn	His	Gln	Glu	Val	Val	Glu	Glu	Asp	Lys	Arg	Leu	Lys	Leu	Pro
			50				55				60				
Ala	Asn	Trp	Glu	Ala	Lys	Lys	Ala	Arg	Leu	Glu	Trp	Glu	Leu	Lys	Glu
65					70					75					80
Glu	Glu	Lys	Lys	Lys	Glu	Cys	Ala	Ala	Arg	Gly	Glu	Asp	Tyr	Glu	Lys

85								90				95					
Val	Lys	Leu	Leu	Glu	Ile	Ser	Ala	Glu	Asp	Ala	Glu	Arg	Trp	Glu	Arg		
100								105				110					
Lys	Lys	Lys	Arg	Lys	Asn	Pro	Asp	Leu	Gly	Phe	Ser	Asp	Tyr	Ala	Ala		
115								120				125					
Ala	Gln	Leu	Arg	Gln	Tyr	His	Arg	Leu	Thr	Lys	Gln	Ile	Lys	Pro	Asp		
130								135				140					
Met	Glu	Thr	Tyr	Glu	Arg	Leu	Arg	Glu	Lys	His	Gly	Glu	Glu	Phe	Phe		
145	150								155								160
Pro	Thr	Ser	Asn	Ser	Leu	Leu	His	Gly	Thr	His	Val	Pro	Ser	Thr	Glu		
165								170				175					
Glu	Ile	Asp	Arg	Met	Val	Ile	Asp	Leu	Glu	Lys	Gln	Ile	Glu	Lys	Arg		
180								185				190					
Asp	Lys	Tyr	Ser	Arg	Arg	Arg	Pro	Tyr	Asn	Asp	Asp	Ala	Asp	Ile	Asp		
195								200				205					
Tyr	Ile	Asn	Glu	Arg	Asn	Ala	Lys	Phe	Asn	Lys	Lys	Ala	Glu	Arg	Phe		
210								215				220					
Tyr	Gly	Lys	Tyr	Thr	Ala	Glu	Ile	Lys	Gln	Asn	Leu	Glu	Arg	Gly	Thr		
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<210> 5615
<211> 1522
<212> DNA
<213> Homo sapiens
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420
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480
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780

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<210> 5616

<211> 507

<212> PRT

<213> Homo sapiens

<400> 5616

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			20					25					30		
Gln	Gln	Gln	Gln	Gln	Gly	Val	Leu	Pro	Gln	Thr	Val	Pro	Ser	Gln	Pro
		35				40						45			
Ser	Ser	Ser	Thr	Val	Pro	Pro	Pro	Pro	His	Arg	Pro	Leu	Tyr	Gln	Pro
	50					55				60					
Met	Gln	Pro	His	Pro	Gln	His	Leu	Ala	Ser	Met	Gly	Phe	Asp	Pro	Arg
65					70				75					80	
Trp	Leu	Met	Met	Gln	Ser	Tyr	Met	Asp	Pro	Arg	Met	Met	Ser	Gly	Arg
			85					90					95		
Pro	Ala	Met	Asp	Ile	Pro	Pro	Ile	His	Pro	Gly	Met	Ile	Pro	Pro	Lys
		100						105					110		
Pro	Leu	Met	Arg	Arg	Asp	Gln	Met	Glu	Gly	Ser	Pro	Asn	Ser	Ser	Glu
		115				120						125			
Ser	Phe	Glu	His	Ile	Ala	Arg	Ser	Ala	Arg	Asp	His	Ala	Ile	Ser	Leu
	130					135					140				
Ser	Glu	Pro	Arg	Met	Leu	Trp	Gly	Ser	Asp	Pro	Tyr	Pro	His	Ala	Glu
145				150					155					160	
Pro	Gln	Gln	Ala	Thr	Thr	Pro	Lys	Ala	Thr	Glu	Glu	Pro	Glu	Asp	Val

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      195      200      205
Glu Ser Ser Glu Ala Gln Val Gln Lys Phe Leu Ser Arg Ser Val Glu
      210      215      220
Asp Val Arg Pro His His Thr Asp Ala Asn Asn Gln Ser Ala Cys Phe
      225      230      235      240
Glu Ala Pro Asp Gln Lys Thr Leu Ser Thr Pro Gln Glu Glu Arg Ile
      245      250      255
Ser Ala Val Glu Ser Gln Pro Ser Arg Lys Arg Ser Val Ser His Gly
      260      265      270
Ser Asn His Thr Gln Lys Pro Asp Glu Gln Arg Ser Glu Pro Ser Ala
      275      280      285
Gly Ile Pro Lys Val Thr Ser Arg Cys Ile Asp Ser Lys Glu Pro Ile
      290      295      300
Glu Arg Pro Glu Glu Lys Pro Lys Lys Glu Gly Phe Ile Arg Ser Ser
      305      310      315      320
Glu Gly Pro Lys Pro Glu Lys Val Tyr Lys Ser Lys Ser Glu Thr Arg
      325      330      335
Trp Gly Pro Arg Pro Ser Ser Asn Arg Arg Glu Glu Val Asn Asp Arg
      340      345      350
Pro Val Arg Arg Ser Gly Pro Ile Lys Lys Pro Val Leu Arg Asp Met
      355      360      365
Lys Glu Glu Arg Glu Gln Arg Lys Glu Lys Glu Gly Glu Lys Ala Glu
      370      375      380
Lys Val Thr Glu Lys Val Val Val Lys Pro Glu Lys Thr Glu Lys Lys
      385      390      395      400
Asp Leu Pro Pro Pro Pro Pro Pro Gln Pro Pro Ala Pro Ile Gln
      405      410      415
Pro Gln Ser Val Pro Pro Pro Ile Gln Pro Glu Ala Glu Lys Phe Pro
      420      425      430
Ser Thr Glu Thr Ala Thr Leu Ala Gln Lys Pro Ser Gln Asp Thr Glu
      435      440      445
Lys Pro Leu Glu Pro Val Ser Thr Val Gln Val Glu Pro Ala Val Lys
      450      455      460
Thr Val Asn Gln Gln Thr Met Ala Ala Pro Val Val Lys Glu Lys Glu
      465      470      475      480
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Gln Lys Glu Lys Glu Lys Glu Leu Gln Lys Lys
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<210> 5617

<211> 3480

<212> DNA

<213> Homo sapiens

<400> 5617

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120

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3360

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<210> 5618

<211> 1003

<212> PRT

<213> Homo sapiens

<400> 5618

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			20					25					30		
Thr	Thr	Pro	Lys	Ser	Phe	Leu	Glu	Gln	Ile	Ser	Leu	Phe	Lys	Asn	Leu
		35				40						45			
Leu	Lys	Lys	Lys	Gln	Asn	Glu	Val	Ser	Glu	Lys	Lys	Glu	Arg	Leu	Val
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Asn	Gly	Ile	Gln	Lys	Leu	Lys	Thr	Thr	Ala	Ser	Gln	Val	Gly	Asp	Leu
65					70					75				80	
Lys	Ala	Arg	Leu	Ala	Ser	Gln	Glu	Ala	Glu	Leu	Gln	Leu	Arg	Asn	His
			85						90					95	
Asp	Ala	Glu	Ala	Leu	Ile	Thr	Lys	Ile	Gly	Leu	Gln	Thr	Glu	Lys	Val
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Ser	Arg	Glu	Lys	Thr	Ile	Ala	Asp	Ala	Glu	Glu	Arg	Lys	Val	Thr	Ala
		115					120						125		
Ile	Gln	Thr	Glu	Val	Phe	Gln	Lys	Gln	Arg	Glu	Cys	Glu	Ala	Asp	Leu
130					135						140				
Leu	Lys	Ala	Glu	Pro	Ala	Leu	Val	Ala	Ala	Thr	Ala	Ala	Leu	Asn	Thr
145					150					155				160	
Leu	Asn	Arg	Val	Asn	Leu	Ser	Glu	Leu	Lys	Ala	Phe	Pro	Asn	Pro	Pro
			165						170					175	
Ile	Ala	Val	Thr	Asn	Val	Thr	Ala	Ala	Val	Met	Val	Leu	Leu	Ala	Pro
		180						185					190		
Arg	Gly	Arg	Val	Pro	Lys	Asp	Arg	Ser	Trp	Lys	Ala	Ala	Lys	Val	Phe
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Met	Gly	Lys	Val	Asp	Asp	Phe	Leu	Gln	Ala	Leu	Ile	Asn	Tyr	Asp	Lys
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Glu	His	Ile	Pro	Glu	Asn	Cys	Leu	Lys	Val	Val	Asn	Glu	His	Tyr	Leu
225					230						235			240	
Lys	Asp	Pro	Glu	Phe	Asn	Pro	Asn	Leu	Ile	Arg	Thr	Lys	Ser	Phe	Ala
			245						250					255	
Ala	Ala	Gly	Leu	Cys	Ala	Trp	Val	Ile	Asn	Ile	Ile	Lys	Phe	Tyr	Glu
		260						265					270		
Val	Tyr	Cys	Asp	Val	Glu	Pro	Lys	Arg	Gln	Ala	Leu	Ala	Gln	Ala	Asn
		275					280					285			
Leu	Glu	Leu	Ala	Ala	Ala	Thr	Glu	Lys	Leu	Glu	Ala	Ile	Arg	Lys	Lys
290						295						300			
Leu	Val	Val	Ser	Ala	Asn	Tyr	Asp	Ile	Glu	Lys	Ser	Glu	Lys	Ile	Arg
305					310						315			320	
Trp	Gly	Gln	Ser	Ile	Lys	Ser	Phe	Glu	Ala	Gln	Glu	Lys	Thr	Leu	Cys
			325						330					335	
Gly	Asp	Val	Leu	Leu	Thr	Ala	Ala	Phe	Val	Ser	Tyr	Val	Gly	Pro	Phe

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Thr	Arg	Gln	Tyr	Arg	Gln	Glu	Leu	Val	His	Cys	Lys	Trp	Val	Pro	Phe	
		355					360					365				
Leu	Gln	Gln	Lys	Val	Ser	Ile	Pro	Leu	Thr	Glu	Gly	Leu	Asp	Leu	Ile	
		370					375				380					
Ser	Met	Leu	Thr	Asp	Asp	Ala	Thr	Ile	Ala	Ala	Trp	Asn	Asn	Glu	Gly	
385					390				395						400	
Leu	Pro	Ser	Asp	Arg	Met	Ser	Thr	Glu	Asn	Ala	Ala	Ile	Leu	Thr	His	
				405					410						415	
Cys	Glu	Arg	Trp	Pro	Leu	Val	Ile	Asp	Pro	Gln	Gln	Gln	Gly	Ile	Lys	
			420					425					430			
Trp	Ile	Lys	Asn	Lys	Tyr	Gly	Met	Asp	Leu	Lys	Val	Thr	His	Leu	Gly	
		435					440					445				
Gln	Lys	Gly	Phe	Leu	Asn	Ala	Ile	Glu	Thr	Ala	Leu	Ala	Phe	Gly	Asp	
		450					455					460				
Val	Ile	Leu	Ile	Glu	Asn	Leu	Glu	Glu	Thr	Ile	Asp	Pro	Val	Leu	Asp	
465					470					475					480	
Pro	Leu	Leu	Gly	Arg	Asn	Thr	Ile	Lys	Lys	Gly	Lys	Tyr	Ile	Arg	Ile	
				485					490					495		
Gly	Asp	Lys	Glu	Cys	Glu	Phe	Asn	Lys	Asn	Phe	Arg	Leu	Ile	Leu	His	
			500					505					510			
Thr	Lys	Leu	Ala	Asn	Pro	His	Tyr	Lys	Pro	Glu	Leu	Gln	Ala	Gln	Thr	
		515					520					525				
Thr	Leu	Leu	Asn	Phe	Thr	Val	Thr	Glu	Asp	Gly	Leu	Glu	Ala	Gln	Leu	
		530					535					540				
Leu	Ala	Glu	Val	Val	Ser	Ile	Glu	Arg	Pro	Asp	Leu	Glu	Lys	Leu	Lys	
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Leu	Val	Leu	Thr	Lys	His	Gln	Asn	Asp	Phe	Lys	Ile	Glu	Leu	Lys	Tyr	
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Leu	Glu	Asp	Asp	Leu	Leu	Leu	Arg	Leu	Ser	Ala	Ala	Glu	Gly	Ser	Phe	
			580					585					590			
Leu	Asp	Asp	Thr	Lys	Leu	Val	Glu	Arg	Leu	Glu	Ala	Thr	Lys	Thr	Thr	
		595					600					605				
Val	Ala	Glu	Ile	Glu	His	Lys	Val	Ile	Glu	Ala	Lys	Glu	Asn	Glu	Arg	
		610					615					620				
Lys	Ile	Asn	Glu	Ala	Arg	Glu	Cys	Tyr	Arg	Pro	Val	Ala	Ala	Arg	Ala	
625					630					635					640	
Ser	Leu	Leu	Tyr	Phe	Val	Ile	Asn	Asp	Leu	Gln	Lys	Ile	Asn	Pro	Leu	
				645					650					655		
Tyr	Gln	Phe	Ser	Leu	Lys	Ala	Phe	Asn	Val	Leu	Phe	His	Arg	Ala	Ile	
			660					665					670			
Glu	Gln	Ala	Asp	Lys	Val	Glu	Asp	Met	Gln	Gly	Arg	Ile	Ser	Ile	Leu	
		675														

770						775						780					
Trp	Val	Glu	Ser	Glu	Cys	Pro	Glu	Lys	Glu	Lys	Leu	Pro	Gln	Glu	Trp		
785					790					795					800		
Lys	Lys	Lys	Ser	Leu	Ile	Gln	Lys	Leu	Ile	Leu	Leu	Arg	Ala	Met	Arg		
				805					810					815			
Pro	Asp	Arg	Met	Thr	Tyr	Ala	Leu	Arg	Asn	Phe	Val	Glu	Glu	Lys	Leu		
			820					825					830				
Gly	Ala	Lys	Tyr	Val	Glu	Arg	Thr	Arg	Leu	Asp	Leu	Val	Lys	Ala	Phe		
		835					840					845					
Glu	Glu	Ser	Ser	Pro	Ala	Thr	Pro	Ile	Phe	Phe	Ile	Leu	Ser	Pro	Gly		
	850				855						860						
Val	Asp	Ala	Leu	Lys	Asp	Leu	Glu	Ile	Leu	Gly	Lys	Arg	Leu	Gly	Phe		
865					870					875					880		
Thr	Ile	Asp	Ser	Gly	Lys	Phe	His	Asn	Val	Ser	Leu	Gly	Gln	Gly	Gln		
				885					890					895			
Glu	Thr	Val	Ala	Glu	Val	Ala	Leu	Glu	Lys	Ala	Ser	Lys	Gly	Gly	His		
		900						905					910				
Trp	Val	Ile	Leu	Gln	Asn	Val	His	Leu	Val	Ala	Lys	Trp	Leu	Gly	Thr		
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Leu	Glu	Lys	Leu	Leu	Glu	Arg	Phe	Ser	Gln	Gly	Ser	His	Arg	Asp	Tyr		
	930					935					940						
Arg	Val	Phe	Met	Ser	Ala	Glu	Ser	Ala	Pro	Thr	Pro	Asp	Glu	His	Ile		
945					950					955					960		
Ile	Pro	Gln	Gly	Leu	Leu	Glu	Asn	Ser	Ile	Lys	Ile	Thr	Asn	Glu	Pro		
			965						970					975			
Pro	Thr	Gly	Met	Leu	Ala	Asn	Leu	His	Ala	Ala	Leu	Tyr	Asn	Phe	Asp		
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<210> 5619

<211> 1219

<212> DNA

<213> Homo sapiens

<400> 5619

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180
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240
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300
gaactgtggg caaaaatggc gatttgctga ccatgaaaga atatcactgt ttgctgcaat
360
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480
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 720
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<210> 5620

<211> 333

<212> PRT

<213> Homo sapiens

<400> 5620

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			20					25					30		
Glu	Asn	Arg	Glu	Asp	Ile	Ser	Gln	Tyr	Gly	Ile	Ala	Arg	Phe	Phe	Thr
		35					40					45			
Glu	Tyr	Phe	Asn	Ser	Val	Cys	Gln	Gly	Thr	His	Ile	Leu	Phe	Arg	Glu
	50					55					60				
Phe	Ser	Phe	Val	Gln	Ala	Thr	Pro	His	Asn	Arg	Val	Ser	Phe	Leu	Arg
65					70					75				80	
Ala	Phe	Trp	Arg	Cys	Phe	Arg	Thr	Val	Gly	Lys	Asn	Gly	Asp	Leu	Leu
			85					90						95	
Thr	Met	Lys	Glu	Tyr	His	Cys	Leu	Leu	Gln	Leu	Leu	Cys	Pro	Asp	Phe
			100					105					110		
Pro	Leu	Glu	Leu	Thr	Gln	Lys	Ala	Ala	Arg	Ile	Val	Leu	Met	Asp	Asp
		115					120					125			
Ala	Met	Asp	Cys	Leu	Met	Ser	Phe	Ser	Asp	Phe	Leu	Phe	Ala	Phe	Gln
	130						135					140			
Ile	Gln	Phe	Tyr	Tyr	Ser	Glu	Phe	Leu	Asp	Ser	Val	Ala	Ala	Ile	Tyr
145					150					155				160	
Glu	Asp	Leu	Leu	Ser	Gly	Lys	Asn	Pro	Asn	Thr	Val	Ile	Val	Pro	Thr
			165					170						175	
Ser	Ser	Ser	Gly	Gln	His	Arg	Gln	Arg	Pro	Ala	Leu	Gly	Gly	Ala	Gly

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                180                185                190
Thr Leu Glu Gly Val Glu Ala Ser Leu Phe Tyr Gln Cys Leu Glu Asn
                195                200                205
Leu Cys Asp Arg His Lys Tyr Ser Cys Pro Pro Pro Ala Leu Val Lys
                210                215                220
Glu Ala Leu Ser Asn Val Gln Arg Leu Thr Phe Tyr Gly Phe Leu Met
225                230                235                240
Ala Leu Ser Lys His Arg Gly Ile Asn Gln Ala Leu Gly Lys Ser Glu
                245                250                255
Leu Ser Ser Arg Gln Pro Leu Leu Pro His Asn Thr Gly Ser Ser Trp
                260                265                270
Pro Leu Leu Ala Thr Arg Leu Gln Arg Gly Arg Gly Ile Thr Ile Ser
                275                280                285
Ala Leu Thr Ser Gln Gly Arg Thr Gln Ser Gln Gly Ala Gly Ile Trp
                290                295                300
Arg Gln Asn Met Ala Leu Thr His Ser His Gly Arg Gly Gln Pro Ser
305                310                315                320
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<210> 5621
 <211> 456
 <212> DNA
 <213> Homo sapiens

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<400> 5621
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120
cggggaagggc caccgccacg gttcagtcca gcttcggggc tcccagcttc atggggccct
180
tggccacctt cctctcgggc cgtttggcct ccattctccc cgcgcgctcc tcgcgcttct
240
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300
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360
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456

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<210> 5622
 <211> 82
 <212> PRT
 <213> Homo sapiens

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<400> 5622
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Ile Cys Gly Ala Gly Ser Pro Gln Pro Gly Arg Ala Thr Ala Thr Val
20          25          30
Gln Ser Ser Phe Arg Ala Pro Ser Phe Met Gly Pro Leu Ala Thr Phe

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35 40 45
 Leu Ser Ala Arg Leu Ala Ser Ile Ser Arg Arg Arg Ser Ser Arg Phe
 50 55 60
 Phe Arg Ala Ser Ser Ala Leu Thr Cys Pro Gly Cys Trp Asp Val Gln
 65 70 75 80
 Thr Gly

<210> 5623
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 5623
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 120
 cggtaaatgc ctctgggagc aaggatcctt ttccacggtg tgttctatgc cgggggcttt
 180
 gccattgtgt attacctcat tcaaaagttt cattccaggg ctttatatta caagttggca
 240
 gtggagcagc tgcagagcca tcccaggga caggaagctc tgggccctcc tctcaacatc
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 357

<210> 5624
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 5624
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 Arg Ile Leu Phe His Gly Val Phe Tyr Ala Gly Gly Phe Ala Ile Val
 20 25 30
 Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys Leu
 35 40 45
 Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
 50 55 60
 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
 65 70 75 80
 Val Asp Ile Val Asp Ala Lys Leu
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<210> 5625
 <211> 1017
 <212> DNA
 <213> Homo sapiens

<400> 5625
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 120
 cgcacgagg cccgtacaca cctgcagctg ggctccgttc tctatcacca caccaagaac
 180
 agcgcagcagg cgcgcagcca cctggagaag gcgtgggtga tatcacagca aatcccacag
 240
 ttcgaagatg ttaaatttga agcagcaagt ctgttgtctg aattgtactg tcaagagaat
 300
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 360
 tattggcact gccgcctgct cttccagctc gctcaactgc acacgcttga gaaggacctg
 420
 gtgtcggcct gtgacctcct ggggtgtaggg gccgagtacg cccgggtggg gggatctgaa
 480
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 540
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 600
 cccatccaga aggagtcgct gcgtgtcttc ttcttggtgc tccaggtcac ccactatctg
 660
 gatgccgggc aggtgaagag cgtgaagccg tgtctgaagc agctgcagca gtgcatccag
 720
 accatctcca cactgcacga tgatgagatc ctgcccagca accccgctga cctcttccac
 780
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 900
 aagctcaaga tgctggactg cagccccatc ctgtcatcct tccaagtgat cctgctggag
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 1017

<210> 5626

<211> 339

<212> PRT

<213> Homo sapiens

<400> 5626

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Thr	Ser	Ser	Pro	Pro	Lys	Ile	Arg	Leu	Cys	Val	His	Cys	Leu	Gln	Ala
			20					25					30		
Val	Phe	Pro	Phe	Lys	Pro	Pro	Gln	Arg	Ile	Glu	Ala	Arg	Thr	His	Leu
			35				40						45		
Gln	Leu	Gly	Ser	Val	Leu	Tyr	His	His	Thr	Lys	Asn	Ser	Glu	Gln	Ala
			50			55					60				
Arg	Ser	His	Leu	Glu	Lys	Ala	Trp	Leu	Ile	Ser	Gln	Gln	Ile	Pro	Gln
65					70				75					80	
Phe	Glu	Asp	Val	Lys	Phe	Glu	Ala	Ala	Ser	Leu	Leu	Ser	Glu	Leu	Tyr
				85				90						95	
Cys	Gln	Glu	Asn	Ser	Val	Asp	Ala	Ala	Lys	Pro	Leu	Leu	Arg	Lys	Ala
			100					105					110		
Ile	Gln	Ile	Ser	Gln	Gln	Thr	Pro	Tyr	Trp	His	Cys	Arg	Leu	Leu	Phe

115 120 125
 Gln Leu Ala Gln Leu His Thr Leu Glu Lys Asp Leu Val Ser Ala Cys
 130 135 140
 Asp Leu Leu Gly Val Gly Ala Glu Tyr Ala Arg Val Val Gly Ser Glu
 145 150 155 160
 Tyr Thr Arg Ala Leu Phe Leu Leu Ser Lys Gly Met Leu Leu Leu Met
 165 170 175
 Glu Arg Lys Leu Gln Glu Val His Pro Leu Leu Thr Leu Cys Gly Gln
 180 185 190
 Ile Val Glu Asn Trp Gln Gly Asn Pro Ile Gln Lys Glu Ser Leu Arg
 195 200 205
 Val Phe Phe Leu Val Leu Gln Val Thr His Tyr Leu Asp Ala Gly Gln
 210 215 220
 Val Lys Ser Val Lys Pro Cys Leu Lys Gln Leu Gln Gln Cys Ile Gln
 225 230 235 240
 Thr Ile Ser Thr Leu His Asp Asp Glu Ile Leu Pro Ser Asn Pro Ala
 245 250 255
 Asp Leu Phe His Trp Leu Pro Lys Glu His Met Cys Val Leu Val Tyr
 260 265 270
 Leu Val Thr Val Met His Ser Met Gln Ala Gly Tyr Leu Glu Lys Ala
 275 280 285
 Gln Lys Tyr Thr Asp Lys Ala Leu Met Gln Leu Glu Lys Leu Lys Met
 290 295 300
 Leu Asp Cys Ser Pro Ile Leu Ser Ser Phe Gln Val Ile Leu Leu Glu
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 His Ile Ile Met Cys Arg Leu Val Thr Gly His Lys Ala Thr Ala Leu
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 Gln Glu Ile

<210> 5627

<211> 1401

<212> DNA

<213> Homo sapiens

<400> 5627

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 120
 aagagccagg gttatgtgca catgggaggt ggggaggaca ggggctgtat gtgacctca
 180
 catctgttcc tcgcgcccc gatggcttct gctgcctgct ccatggaccc catcgacagc
 240
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 360
 ctcagctcca tcttgggctc tggagactca ctgccagct cccactctg gtcccccgaa
 420
 ggcagtata gtggcatctc cgaagacctc ccctccgacc ccaggacac ccctccacgc
 480
 agcggaccag ccacctcccc cgccggctgc catctgccc agcctggcaa ggggcctgc
 540

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 600
 cagcatcacc tgggggcctc ctacctcctg cgacctgggg ctgggcactg tcaggagctg
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 1380
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<210> 5628

<211> 299

<212> PRT

<213> Homo sapiens

<400> 5628

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Leu	Asp	Leu	Leu	Phe	Asp	Arg	Gln	Asp	Gly	Ile	Leu	Arg	His	Val	Glu
			20					25					30		
Leu	Gly	Glu	Gly	Trp	Gly	His	Val	Lys	Asp	Gln	Val	Leu	Pro	Asn	Pro
			35				40					45			
Asp	Ser	Asp	Asp	Phe	Leu	Ser	Ser	Ile	Leu	Gly	Ser	Gly	Asp	Ser	Leu
	50				55					60					
Pro	Ser	Ser	Pro	Leu	Trp	Ser	Pro	Glu	Gly	Ser	Asp	Ser	Gly	Ile	Ser
65				70					75					80	
Glu	Asp	Leu	Pro	Ser	Asp	Pro	Gln	Asp	Thr	Pro	Pro	Arg	Ser	Gly	Pro
			85					90						95	
Ala	Thr	Ser	Pro	Ala	Gly	Cys	His	Pro	Ala	Gln	Pro	Gly	Lys	Gly	Pro
			100					105					110		
Cys	Leu	Ser	Tyr	His	Pro	Gly	Asn	Ser	Cys	Ser	Thr	Thr	Thr	Pro	Gly
	115					120					125				
Pro	Val	Ile	Gln	Gln	Gln	His	His	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Arg

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      130              135              140
Pro Gly Ala Gly His Cys Gln Glu Leu Val Leu Thr Glu Asp Glu Lys
145              150              155              160
Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu
      165              170              175
Thr Lys Tyr Glu Glu Arg Val Leu Lys Lys Ile Arg Arg Lys Ile Arg
      180              185              190
Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Lys Glu Tyr Ile
      195              200              205
Asp Gly Leu Glu Thr Arg Ser Cys Cys Cys Pro Leu Pro Ser Ser Ser
      210              215              220
Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly
225              230              235              240
Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu
      245              250              255
Pro Pro Ala Trp Leu Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp
      260              265              270
Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro
      275              280              285
Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr
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<210> 5629

<211> 428

<212> DNA

<213> Homo sapiens

<400> 5629

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180
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300
tccccattc tctgtaccc tctcttggag ctcccagttc catctgagaa attatctact
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428

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<210> 5630

<211> 110

<212> PRT

<213> Homo sapiens

<400> 5630

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Met Asp Gly Arg His Thr Gln Ser Pro Leu Thr Glu Asp Lys Ala Gly
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Ala Tyr Arg Glu Cys Thr Thr Trp Pro Arg Ala His Gln Leu Ala Ile

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<400> 5632
Met Gly Val Pro Trp Ala Trp Arg Arg Gln Gln Glu Gly Val Thr Gly


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Ala Gly Ala Gly Ala Gly His Leu Thr Pro Gln Ala Ser Pro Thr Ser
      20             25             30
Glu Leu Pro Thr Ala Lys Thr Pro Gly Glu Ala Gly Arg Gly Gly Val
      35             40             45
Arg Gly Lys Glu Gly Leu Cys Glu Ser Lys Pro His Pro Gln Ser Arg
      50             55             60
Ala Glu Thr Gln Val Cys Lys Ser His Pro Pro Pro Thr Ser Ser Ser
      65             70             75             80
Phe Glu Ala Ser Ser Thr Arg Gly Arg Ala Gly Ala Ala Gln Arg Pro
      85             90             95
Glu Lys Gly Lys Pro His Arg Arg Lys Leu Lys Ala Ser Val Pro Cys
      100            105            110
Val Ser Ala Glu Arg Val Asn Gly Pro Lys Gly Ser Ser Leu Gln Thr
      115            120            125
Ala Arg Ile His Pro Thr Gly Gly His Arg Thr Arg Pro Gly Pro Ser
      130            135            140
Ala Ser Val Pro Val Gln Pro Thr Pro Val Gln Pro Gly Ala Leu Ser
      145            150            155            160
Asp Leu Thr Thr Arg Val Pro Ser Thr Cys Val His Thr Gln Met Gln
      165            170            175
Glu Arg Thr His Thr Thr Val
      180

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<210> 5633

<211> 2181

<212> DNA

<213> Homo sapiens

<400> 5633

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120
gtcaattgta tgtggtgctg tctgtcctcc tgattgcaga ggaggaagga accccttaaa
180
tgagcggggt ctgagtgtcg gggccgtcgg tctgctctgc ctggtgggat tctccagtgc
240
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300
aatccatccc tagagttcac aggagatcta gggcagagtt tccaagctgc agctgctctg
360
gccctgtgtg agctgctgct ctgaggaagc cccaggctga ggtagctacc aggcggagggc
420
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480
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540
cctccccaaa gccgcctgga taaggggctg gccgcactgg tgcgggagcg tggcgcggat
600
ctggtggtca tcgagggcat gggcgtgct gtccacacaa actaccacgc agccctgcgc
660
tgcgagagcc tcaagctggc cgtcatcaag aacgcgtggc tggccgagcg gctggggcggc
720

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cggtctttca ggcctatctt caagtacgag gtcccagccg agtgaggcgc tgcagctgcc
780
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840
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960
ccctgaacga cgtgaccac agcgagtcct tcctcgtggc agagcgtatt gcgggcatgg
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accctgaccg tgcgcagcct gctggacacc agggagcact gtctgaacga gttcaacttc
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1980
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2160
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2181

<210> 5634

<211> 289

<212> PRT

<213> Homo sapiens

<400> 5634

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      20           25           30
Phe Asn Phe Pro Asp Pro Tyr Ser Lys Val Lys Gln Arg Glu Asn Gly
      35           40           45
Val Ala Leu Arg Cys Phe Pro Gly Val Val Arg Ser Leu Asp Ala Leu
      50           55           60
Gly Trp Glu Glu Arg Gln Leu Ala Leu Val Lys Gly Leu Leu Ala Gly
65           70           75           80
Asn Val Phe Asp Trp Gly Ala Lys Ala Val Ser Ala Val Leu Glu Ser
      85           90           95
Asp Pro Tyr Phe Gly Phe Glu Glu Ala Lys Arg Lys Leu Gln Glu Arg
      100          105          110
Pro Trp Leu Val Asp Ser Tyr Ser Glu Trp Leu Gln Arg Leu Lys Gly
      115          120          125
Pro Pro His Lys Cys Ala Leu Ile Phe Ala Asp Asn Ser Gly Ile Asp
      130          135          140
Ile Ile Leu Gly Val Phe Pro Phe Val Arg Glu Leu Leu Leu Arg Gly
145          150          155          160
Thr Glu Val Ile Leu Ala Cys Asn Ser Gly Pro Ala Leu Asn Asp Val
      165          170          175
Thr His Ser Glu Ser Leu Ile Val Ala Glu Arg Ile Ala Gly Met Asp
      180          185          190
Pro Val Val His Ser Ala Leu Gln Glu Glu Arg Leu Leu Leu Val Gln
      195          200          205
Thr Gly Ser Ser Ser Pro Cys Leu Asp Leu Ser Arg Leu Asp Lys Gly
      210          215          220
Leu Ala Ala Leu Val Arg Glu Arg Gly Ala Asp Leu Val Val Ile Glu
225          230          235          240
Gly Met Gly Arg Ala Val His Thr Asn Tyr His Ala Ala Leu Arg Cys
      245          250          255
Glu Ser Leu Lys Leu Ala Val Ile Lys Asn Ala Trp Leu Ala Glu Arg
      260          265          270
Leu Gly Gly Arg Leu Phe Ser Val Ile Phe Lys Tyr Glu Val Pro Ala
      275          280          285
Glu

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<210> 5635

<211> 614

<212> DNA

<213> Homo sapiens

<400> 5635

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120
gcactcatca atgggtgatga aaacctggcc tgccaaatat atgaaaacaa tcctcagcta
180

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aaagaatctc ttgatccaaa tacatcttat ggggagccct accagcacia tactccatta
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 300
 tgtctgcaga tgatcttaaa atggaaagga gcaaaacttg accaggggtga atatgagaga
 360
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 420
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 480
 gatactcctt gtgattgtgc tgaaaagcaa caccacaaag atttggccct caatctggaa
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 614

<210> 5636

<211> 204

<212> PRT

<213> Homo sapiens

<400> 5636

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			20					25					30		
Asn	Thr	Thr	Thr	Lys	Phe	Arg	Lys	Ala	Leu	Ile	Asn	Gly	Asp	Glu	Asn
	35					40					45				
Leu	Ala	Cys	Gln	Ile	Tyr	Glu	Asn	Asn	Pro	Gln	Leu	Lys	Glu	Ser	Leu
50					55				60						
Asp	Pro	Asn	Thr	Ser	Tyr	Gly	Glu	Pro	Tyr	Gln	His	Asn	Thr	Pro	Leu
65				70				75						80	
His	Tyr	Ala	Ala	Arg	His	Gly	Met	Asn	Lys	Ile	Leu	Gly	Asp	Asp	Phe
			85					90					95		
Arg	Arg	Ala	Asp	Cys	Leu	Gln	Met	Ile	Leu	Lys	Trp	Lys	Gly	Ala	Lys
		100					105						110		
Leu	Asp	Gln	Gly	Glu	Tyr	Glu	Arg	Ala	Ala	Ile	Asp	Ala	Val	Asp	Asn
	115					120					125				
Lys	Lys	Asn	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Ser	Gly	Met	Lys	Ala
	130				135						140				
Cys	Val	Glu	Lys	His	Gly	Gly	Asp	Leu	Phe	Ala	Glu	Asn	Glu	Asn	Lys
145				150				155						160	
Asp	Thr	Pro	Cys	Asp	Cys	Ala	Glu	Lys	Gln	His	His	Lys	Asp	Leu	Ala
			165					170					175		
Leu	Asn	Leu	Glu	Ser	Gln	Met	Val	Phe	Ser	Arg	Asp	Pro	Glu	Ala	Glu
		180					185						190		
Glu	Ile	Glu	Ala	Glu	Tyr	Ala	Ala	Leu	Asp	Lys	Arg				
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<210> 5637

<211> 825

<212> DNA

<213> Homo sapiens

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 825

<210> 5638
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 5638
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 20 25 30
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 35 40 45
 Leu Ala Gly Arg Leu Ala Arg Ala Pro Leu Trp Leu Ala Cys Gly Asp
 50 55 60
 Thr Trp Ala Leu Leu His Val Pro Thr Arg Ala Val Ala Gly Ser Lys
 65 70 75 80
 Glu Ala Gln Pro Arg Pro Ala Cys Val Asp Pro Ala Gly Leu Arg Ala
 85 90 95
 Pro Glu Leu Leu Thr Val Ser Glu Pro Gly Cys Pro Ala Pro Arg Arg
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 Pro Pro Ser Ser Cys Pro Ala Trp Asp Pro Ser Ala Val Cys Leu Leu
 115 120 125
 Asn Gln Gly Val

130

<210> 5639

<211> 2433

<212> DNA

<213> Homo sapiens

<400> 5639

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1380

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<210> 5640

<211> 540

<212> PRT

<213> Homo sapiens

<400> 5640

Met Cys Pro Ser Pro Glu Arg Gln Glu Asp Gly Ala Arg Lys Asp Phe
 1 5 10 15
 Ser Ser Arg Leu Ala Ala Gly Pro Thr Phe Gln His Phe Leu Lys Ser
 20 25 30
 Ala Ser Ala Pro Gln Glu Lys Leu Ser Ser Glu Val Glu Asp Pro Pro
 35 40 45
 Pro Tyr Leu Met Met Asp Glu Leu Leu Gly Arg Gln Arg Lys Val Tyr
 50 55 60
 Leu Glu Thr Tyr Gly Cys Gln Met Asn Val Asn Asp Thr Glu Ile Ala
 65 70 75 80
 Trp Ser Ile Leu Gln Lys Ser Gly Tyr Leu Arg Pro Val Thr Ser Lys

4820

515 520 525
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<210> 5641
 <211> 293
 <212> DNA
 <213> Homo sapiens

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 caggtgggag aggaggtgtg gctggctggg gcacccctgg catccctgga gagccaggtg
 180
 aggagggcag atacaagcag aaattccagt cagtgttcac ggtcactcgg cagacccacc
 240
 agccccctgc acccaacagc ctgatcagat tcaacgcggg cctcaccaac ccg
 293

<210> 5642
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 5642
 Ala Ser His Thr Ala Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val
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 Lys Val Val Thr Phe Cys Gly His Ala Ser Lys Thr Asn Gln Val Asn
 20 25 30
 Ser Gly Gly Val Leu Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu
 35 40 45
 Ala Gly Ala Pro Leu Ala Ser Leu Glu Ser Gln Val Arg Arg Ala Asp
 50 55 60
 Thr Ser Arg Asn Ser Ser Gln Cys Ser Arg Ser Leu Gly Arg Pro Thr
 65 70 75 80
 Ser Pro Leu His Pro Thr Ala
 85

<210> 5643
 <211> 1218
 <212> DNA
 <213> Homo sapiens

<400> 5643
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 aaagccaaac gatatcacat ggatgccagt ggtgaggctg taagcgaaac tcttcagttt
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 aaagctcaag atctcttaag ggcagtccca agatccagag cagagatgta tgatgacgtc
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cacagcgatg gcagatactc cctcagtggg tctgtagctc actctagaga tgccggaaga
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 gaaggcctga gaagtgcgt atttccaggg ccttccttca gatcaagcaa cccttccatc
 360
 agtgatgaca gctactttcg caaagaatgt ggccggggtc tgggaatttc tcaactctgat
 420
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 480
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 660
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 720
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 780
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 840
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<210> 5644

<211> 202

<212> PRT

<213> Homo sapiens

<400> 5644

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Gln	Glu	Tyr	Ser	Phe	Gly	Pro	Ser	Ala	Val	Leu	Gly	Asp	Phe	Gly	Ser
			20					25					30		
Ser	Arg	Leu	Ile	Glu	Lys	Glu	Cys	Leu	Glu	Lys	Glu	Ser	Arg	Asp	Tyr
		35				40					45				
Asp	Val	Asp	His	Pro	Gly	Glu	Ala	Asp	Ser	Val	Leu	Arg	Gly	Ser	Ser
	50				55					60					
Gln	Val	Gln	Ala	Arg	Gly	Arg	Ala	Leu	Asn	Ile	Val	Asp	Gln	Glu	Gly
65				70				75						80	
Ser	Leu	Leu	Gly	Lys	Gly	Glu	Thr	Gln	Gly	Leu	Leu	Thr	Ala	Lys	Gly
			85			90							95		
Gly	Val	Gly	Lys	Leu	Val	Thr	Leu	Arg	Asn	Val	Ser	Thr	Lys	Lys	Ile

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          100          105          110
Pro Thr Val Asn Arg Ile Thr Pro Lys Thr Gln Gly Thr Asn Gln Ile
          115          120          125
Gln Lys Asn Thr Pro Ser Pro Asp Val Thr Leu Gly Thr Asn Pro Gly
          130          135          140
Thr Glu Asp Ile Gln Phe Pro Ile Gln Lys Ile Pro Leu Gly Leu Asp
          145          150          155          160
Leu Lys Asn Leu Arg Leu Pro Arg Arg Lys Met Ser Phe Asp Ile Ile
          165          170          175
Asp Lys Ser Asp Val Phe Ser Arg Phe Gly Ile Glu Ile Ile Lys Trp
          180          185          190
Ala Gly Phe His Thr Ile Lys Leu Asp Tyr
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<210> 5645
 <211> 156
 <212> DNA
 <213> Homo sapiens

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<400> 5645
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156

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<210> 5646
 <211> 52
 <212> PRT
 <213> Homo sapiens

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<400> 5646
Pro Arg Pro Ser Arg Arg Arg Asn Cys Arg Trp Ala Val Phe Gly Leu
1      5      10      15
Ala Gln Arg Cys Pro Gln Ile Ser Phe Pro Ser Pro Arg Gln Glu Asp
20     25     30
Thr Ser Thr Gly Lys Phe Thr Cys Lys Val Pro Gly Leu Tyr Tyr Phe
35     40     45
Val Tyr His Ala
50

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<210> 5647
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 <212> DNA
 <213> Homo sapiens

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aagggagaac ccggcttacc cggccatccn
150

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<210> 5648
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 5648
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 Phe Phe Pro Gly Arg Pro Lys Gly Glu Pro Gly Ile Pro Ala Ile Pro
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 Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu Pro Gly
 35 40 45
 His Pro
 50

<210> 5649
 <211> 345
 <212> DNA
 <213> Homo sapiens

<400> 5649
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 gacccgagtc tccggcgag cgcgggcggc ttgctccgct cgcaggtcat ccacagcggt
 180
 cacttcatgg tgcgtcgcc gcacagcgac tcgctgcccc ggcggcgcca ccaggagggt
 240
 ccgtggggcc ctccgacttc gggccgcgca gtatcgaccc cacactcaca cgcctcttcg
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 345

<210> 5650
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 5650
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 Gln Thr Arg Thr Arg Thr Gln Thr Arg Arg Thr Arg Val Ser Gly Ala
 20 25 30
 Ala Arg Ala Ala Cys Ser Ala Arg Arg Ser Ser Thr Ala Val Thr Ser
 35 40 45
 Trp Cys Arg Arg Arg Thr Ala Thr Arg Cys Pro Gly Gly Ala Thr Arg
 50 55 60
 Arg Val Arg Gly Ala Leu Arg Leu Arg Ala Ala Gln Tyr Arg Pro His
 65 70 75 80
 Thr His Thr Pro Leu Arg Val Leu Glu Pro Gly Leu Gln Trp Gln Ala
 85 90 95
 Gly Val Ser Gln

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<210> 5651
 <211> 615
 <212> DNA
 <213> Homo sapiens

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 300
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 360
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 420
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 480
 agggggaaca ttgttcttac agattatgag tacgtaattt taaatattct aagggttcga
 540
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 600
 agagctgctg aacct
 615

<210> 5652
 <211> 163
 <212> PRT
 <213> Homo sapiens

<400> 5652
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 20 25 30
 Asp Asn Lys Thr Tyr Leu Ile Arg Leu Gln Lys Pro Asp Phe Lys Ala
 35 40 45
 Thr Leu Leu Leu Glu Ser Gly Ile Gln Ile His Thr Thr Glu Phe Glu
 50 55 60
 Trp Pro Lys Asn Met Met Pro Ser Ser Phe Ala Met Lys Cys Arg Lys
 65 70 75 80
 His Leu Lys Ser Arg Arg Leu Val Ser Ala Lys Gln Leu Gly Val Asp
 85 90 95
 Arg Ile Val Asp Phe Gln Phe Gly Ser Asp Glu Ala Ala Tyr His Leu
 100 105 110
 Ile Ile Glu Leu Tyr Asp Arg Gly Asn Ile Val Leu Thr Asp Tyr Glu
 115 120 125
 Tyr Val Ile Leu Asn Ile Leu Arg Phe Arg Thr Asp Glu Ala Asp Asp

	130		135		140										
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Ala	Glu	Pro													

<210> 5653

<211> 1439

<212> DNA

<213> Homo sapiens

<400> 5653

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1260

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<210> 5654
 <211> 245
 <212> PRT
 <213> Homo sapiens

<400> 5654
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 Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp
 35 40 45
 Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala
 50 55 60
 Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu
 65 70 75 80
 Pro Gly His Pro Gly Lys Asn Gly Pro Met Gly Pro Pro Gly Met Pro
 85 90 95
 Gly Val Pro Gly Pro Met Gly Ile Pro Gly Glu Pro Gly Glu Glu Gly
 100 105 110
 Arg Tyr Lys Gln Lys Phe Gln Ser Val Phe Thr Val Thr Arg Gln Thr
 115 120 125
 His Gln Pro Pro Ala Pro Asn Ser Leu Ile Arg Phe Asn Ala Val Leu
 130 135 140
 Thr Asn Pro Gln Gly Asp Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys
 145 150 155 160
 Lys Val Pro Gly Leu Tyr Tyr Phe Val Tyr His Ala Ser His Thr Ala
 165 170 175
 Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val Lys Val Val Thr Phe
 180 185 190
 Cys Gly His Thr Ser Lys Thr Asn Gln Val Asn Ser Gly Gly Val Leu
 195 200 205
 Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu Ala Val Asn Asp Tyr
 210 215 220
 Tyr Asp Met Val Gly Ile Gln Gly Ser Asp Ser Val Phe Ser Gly Phe
 225 230 235 240
 Leu Leu Phe Pro Asp
 245

<210> 5655
 <211> 3810
 <212> DNA
 <213> Homo sapiens

<400> 5655
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<210> 5656

<211> 987

<212> PRT

<213> Homo sapiens

<400> 5656

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			20					25					30		
Ala	Glu	Val	Arg	Arg	Glu	Trp	Ala	Lys	Tyr	Met	Glu	Val	His	Glu	Lys
		35					40					45			
Ala	Ser	Phe	Thr	Asn	Ser	Glu	Leu	His	Arg	Ala	Met	Asn	Leu	His	Val
	50					55					60				
Gly	Asn	Leu	Arg	Leu	Leu	Ser	Gly	Pro	Leu	Asp	Gln	Val	Arg	Ala	Ala
65				70					75					80	
Leu	Pro	Thr	Pro	Ala	Leu	Ser	Pro	Glu	Asp	Lys	Ala	Val	Leu	Gln	Asn
			85					90					95		
Leu	Lys	Arg	Ile	Leu	Ala	Lys	Val	Gln	Glu	Met	Arg	Asp	Gln	Arg	Val
			100					105					110		
Ser	Leu	Glu	Gln	Gln	Leu	Arg	Glu	Leu	Ile	Gln	Lys	Asp	Asp	Ile	Thr
	115						120					125			
Ala	Ser	Leu	Val	Thr	Thr	Asp	His	Ser	Glu	Met	Lys	Lys	Leu	Phe	Glu
	130					135						140			
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Leu	Ala	Ala	Gln	Asp	Arg	Val	Leu	Cys	Ala	Leu	Thr	Glu	Ala	Asn	Val
			165					170						175	
Gln	Tyr	Ala	Ala	Val	Arg	Arg	Val	Leu	Ser	Asp	Leu	Asp	Gln	Lys	Trp
			180					185					190		
Asn	Ser	Thr	Leu	Gln	Thr	Leu	Val	Ala	Ser	Tyr	Glu	Ala	Tyr	Glu	Asp
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Leu	Met	Lys	Lys	Ser	Gln	Glu	Gly	Arg	Asp	Phe	Tyr	Ala	Asp	Leu	Glu
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Ser	Lys	Val	Ala	Ala	Leu	Leu	Glu	Arg	Thr	Gln	Ser	Thr	Cys	Gln	Ala

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Pro	Pro	Pro	Arg	Pro	Thr	Ala	Pro	Lys	Pro	Leu	Leu	Pro	Arg	Arg	Glu																															
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Glu	Ser	Glu	Ala	Val	Glu	Ala	Gly	Asp	Pro	Pro	Glu	Glu	Leu	Arg	Ser																															
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Leu	Pro	Pro	Asp	Met	Val	Ala	Gly	Pro	Arg	Leu	Pro	Asp	Thr	Phe	Leu																															
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Gly	Ser	Ala	Thr	Pro	Leu	His	Phe	Pro	Pro	Ser	Pro	Phe	Pro	Ser	Ser																															
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Thr	Gly	Pro	Gly	Pro	His	Tyr	Leu	Ser	Gly	Pro	Leu	Pro	Pro	Gly	Thr																															
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Tyr	Ser	Gly	Pro	Thr	Gln	Leu	Ile	Gln	Pro	Arg	Ala	Pro	Gly	Pro	His																															
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Ala	Met	Pro	Val	Ala	Pro	Gly	Pro	Ala	Leu	Tyr	Pro	Ala	Pro	Ala	Tyr																															
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Thr	Pro	Glu	Leu	Gly	Leu	Val	Pro	Arg	Ser	Ser	Pro	Gln	His	Gly	Val																															
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Val	Ser	Ser	Pro	Tyr	Val	Gly	Val	Gly	Pro	Ala	Pro	Val	Ala	Gly																																
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Pro	Ser	His	Thr	Ala	Pro	Arg	Pro	Asn	Pro	Thr	Pro	Ala	Pro	Pro	Pro																															
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Pro	Cys	Phe	Pro	Val	Pro	Pro	Pro	Gln	Pro	Leu	Pro	Thr	Pro	Tyr	Thr																															
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Ser	Gly	Ile	Pro	Thr	Gly	Phe	Pro	Ala	Pro	Arg	Ile	Gly	Pro	Gln	Pro																															
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Gln	Pro	His	Pro	Gln	Pro	His	Pro	Ser	Gln	Ala	Phe	Gly	Pro	Gln	Pro																															
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Pro	Gln	Gln	Pro	Leu	Pro	Leu	Gln	His	Pro	His	Leu	Phe	Pro	Pro	Gln																															
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Ala	Pro	Gly	Leu	Leu	Pro	Pro	Gln	Ser	Pro	Tyr	Pro	Tyr	Ala	Pro	Gln																															
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Pro	Gly	Val	Leu	Gly	Gln	Pro	Pro	Pro	Pro	Leu	His	Thr	Gln	Leu	Tyr																															
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Pro	Gly	Pro	Ala	Gln	Asp	Pro	Leu	Pro	Ala	His	Ser	Gly	Ala	Leu	Pro																															
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Phe	Pro	Ser	Pro	Gly	Pro	Pro	Gln	Pro	Pro	His	Pro	Pro	Leu	Ala	Tyr																															
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Gly	Pro	Ala	Pro	Ser	Thr	Arg	Pro	Met	Gly	Pro	Gln	Ala	Ala	Pro	Leu																															
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Thr	Ile	Arg	Gly	Pro	Ser	Ser	Ala	Gly	Gln	Ser	Thr	Pro	Ser	Pro	His																															
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Ala	Ala	Glu	Gly	Arg	Arg	Pro	Gln	Ala	Leu	Arg	Leu	Ile	Glu	Arg	Asp	Ala	Ala	Glu	Gly	Arg	Arg	Pro	Gln	Ala	Leu	Arg	Leu	Ile	Glu	Arg	Asp	Ala	Ala	Glu	Gly	Arg	Arg	Pro	Gln	Ala	Leu	Arg	Leu	Ile	Glu	Arg	Asp
Pro	Tyr	Glu	His	Pro	Glu	Arg	Leu	Arg	Gln	Leu	Gln	Gln	Glu	Leu	Glu	Pro	Tyr	Glu	His	Pro	Glu	Arg	Leu	Arg	Gln	Leu	Gln	Gln	Glu	Leu	Glu	Pro	Tyr	Glu	His	Pro	Glu	Arg	Leu	Arg	Gln	Leu	Gln	Gln	Glu	Leu	Glu
Ala	Phe	Arg	Gly	Gln	Leu	Gly	Asp	Val	Gly	Ala	Leu	Asp	Thr	Val	Trp	Ala	Phe	Arg	Gly	Gln	Leu	Gly	Asp	Val	Gly	Ala	Leu	Asp	Thr	Val	Trp	Ala	Phe	Arg	Gly	Gln	Leu	Gly	Asp	Val	Gly	Ala	Leu	Asp	Thr	Val	Trp
Arg	Glu	Leu	Gln	Asp	Ala	Gln	Glu	His	Asp	Ala	Arg	Gly	Arg	Ser	Ile	Arg	Glu	Leu	Gln	Asp	Ala	Gln	Glu	His	Asp	Ala	Arg	Gly	Arg	Ser	Ile	Arg	Glu	Leu	Gln	Asp	Ala	Gln	Glu	His	Asp	Ala	Arg	Gly	Arg	Ser	Ile
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Ile	Asn	Ala	Ser	Cys	Val	Glu	Gly	Leu	Ser	Pro	Tyr	Cys	Pro	Pro	Leu	Ile	Asn	Ala	Ser	Cys	Val	Glu	Gly	Leu	Ser	Pro	Tyr	Cys	Pro	Pro	Leu	Ile	Asn	Ala	Ser	Cys	Val	Glu	Gly	Leu	Ser	Pro	Tyr	Cys	Pro	Pro	Leu
Val	Ala	Thr	Gln	Ala	Pro	Leu	Pro	Gly	Thr	Ala	Ala	Asp	Phe	Trp	Leu	Val	Ala	Thr	Gln	Ala	Pro	Leu	Pro	Gly	Thr	Ala	Ala	Asp	Phe	Trp	Leu	Val	Ala	Thr	Gln	Ala	Pro	Leu	Pro	Gly	Thr	Ala	Ala	Asp	Phe	Trp	Leu
Met	Val	His	Glu	Gln	Lys	Val	Ser	Val	Ile	Val	Met	Leu	Val	Ser	Glu	Met	Val	His	Glu	Gln	Lys	Val	Ser	Val	Ile	Val	Met	Leu	Val	Ser	Glu	Met	Val	His	Glu	Gln	Lys	Val	Ser	Val	Ile	Val	Met	Leu	Val	Ser	Glu
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Arg	Ser	Thr	Glu	Thr	His	Val	Glu	Arg	Val	Leu	Ser	Leu	Gln	Phe	Arg	Arg	Ser	Thr	Glu	Thr	His	Val	Glu	Arg	Val	Leu	Ser	Leu	Gln	Phe	Arg	Arg	Ser	Thr	Glu	Thr	His	Val	Glu	Arg	Val	Leu	Ser	Leu	Gln	Phe	Arg
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<211> 1020

<212> DNA

<213> Homo sapiens

<400> 5657

<400> 5657
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[illegible]

gcctcgggct atgggaccca gaacattcga ctgagccggg atgccgtgaa ggacttcgat

180

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 720
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 840
 ggagacaaac tcacagaccg cgacatcatc gtgctgcagc ggggcggtac cggcttcgcg
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<210> 5658

<211> 301

<212> PRT

<213> Homo sapiens

<400> 5658

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His	Glu	Lys	Lys	Lys	Asp	Thr	Ala	Ala	Ser	Gly	Tyr	Gly	Thr	Gln	Asn
			20					25					30		
Ile	Arg	Leu	Ser	Arg	Asp	Ala	Val	Lys	Asp	Phe	Asp	Cys	Cys	Cys	Leu
		35					40					45			
Ser	Leu	Gln	Pro	Cys	His	Asp	Pro	Val	Val	Thr	Pro	Asp	Gly	Tyr	Leu
	50					55					60				
Tyr	Glu	Arg	Glu	Ala	Ile	Leu	Glu	Tyr	Ile	Leu	His	Gln	Lys	Lys	Glu
65					70				75					80	
Ile	Ala	Arg	Gln	Met	Lys	Ala	Tyr	Glu	Lys	Gln	Arg	Gly	Thr	Arg	Arg
			85					90					95		
Glu	Glu	Gln	Lys	Glu	Leu	Gln	Arg	Ala	Ala	Ser	Gln	Asp	His	Val	Arg
			100					105					110		
Gly	Phe	Leu	Glu	Lys	Glu	Ser	Ala	Ile	Val	Ser	Arg	Pro	Leu	Asn	Pro
		115					120					125			
Phe	Thr	Ala	Lys	Ala	Leu	Ser	Gly	Thr	Ser	Pro	Asp	Asp	Val	Gln	Pro
	130					135					140				
Gly	Pro	Ser	Val	Gly	Pro	Pro	Ser	Lys	Asp	Lys	Asp	Lys	Val	Leu	Pro

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Ser Phe Trp Ile Pro Ser Leu Thr Pro Glu Ala Lys Ala Thr Lys Leu
          165          170          175
Glu Lys Pro Ser Arg Thr Val Thr Cys Pro Met Ser Gly Lys Pro Leu
          180          185          190
Arg Met Ser Asp Leu Thr Pro Val His Phe Thr Pro Leu Asp Ser Ser
          195          200          205
Val Asp Arg Val Gly Leu Ile Thr Arg Ser Glu Arg Tyr Val Cys Ala
          210          215          220
Val Thr Arg Asp Ser Leu Ser Asn Ala Thr Pro Cys Ala Val Leu Arg
225          230          235          240
Pro Ser Gly Ala Val Val Thr Leu Glu Cys Val Glu Lys Leu Ile Arg
          245          250          255
Lys Asp Met Val Asp Pro Val Thr Gly Asp Lys Leu Thr Asp Arg Asp
          260          265          270
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Lys Leu Gln Ala Glu Lys Ser Arg Pro Val Met Gln Ala
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<210> 5659

<211> 1263

<212> DNA

<213> Homo sapiens

<400> 5659

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120
tcagagaagg cttagatcta tgcattgggt gttattctca gatgcagaga tgtaaagtc
180
atttttctct tctgttttca ggtcacatgt gccaatttaa cgaacgggtg aaagtcagaa
240
cttctgaaat caggaagcag caaatccaca ctaaagcaca tatggacaga aagcagcaaa
300
gacttgtcta tcagccgact cctgtcacag acttttcgtg gcaaagagaa tgatacagat
360
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420
aggaactcca cagaccttca agagcctcgg ccagggcca agagaaggcc cattgttaaa
480
acgggcaagt ttaagaaaat gtttggtggt ggcgattttc attccaacat caaaacagt
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600
tatttcaggc ataattcaac tgggtcaagg aatgtatctg tcagcttgggt accccctaca
660
aaaatcgtgg aatttgactt ggcacaacaa accgtgattg atgccaaaga ttccaagtct
720
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780
tatgacctt caaaaacctg ttaccaggag caaacccaaa gtcattgtatc ctggctctgc
840

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 960
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 1080
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<210> 5660

<211> 253

<212> PRT

<213> Homo sapiens

<400> 5660

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Ser	Gly	Ser	Ser	Lys	Ser	Thr	Leu	Lys	His	Ile	Trp	Thr	Glu	Ser	Ser
			20					25					30		
Lys	Asp	Leu	Ser	Ile	Ser	Arg	Leu	Leu	Ser	Gln	Thr	Phe	Arg	Gly	Lys
			35				40					45			
Glu	Asn	Asp	Thr	Asp	Leu	Asp	Leu	Arg	Tyr	Asp	Thr	Pro	Glu	Pro	Tyr
			50			55					60				
Ser	Glu	Gln	Asp	Leu	Trp	Asp	Trp	Leu	Arg	Asn	Ser	Thr	Asp	Leu	Gln
					70					75					80
Glu	Pro	Arg	Pro	Arg	Ala	Lys	Arg	Arg	Pro	Ile	Val	Lys	Thr	Gly	Lys
				85					90					95	
Phe	Lys	Lys	Met	Phe	Gly	Trp	Gly	Asp	Phe	His	Ser	Asn	Ile	Lys	Thr
			100					105					110		
Val	Lys	Leu	Asn	Leu	Leu	Ile	Thr	Gly	Lys	Ile	Val	Asp	His	Gly	Asn
			115					120					125		
Gly	Thr	Phe	Ser	Val	Tyr	Phe	Arg	His	Asn	Ser	Thr	Gly	Gln	Gly	Asn
							135				140				
Val	Ser	Val	Ser	Leu	Val	Pro	Pro	Thr	Lys	Ile	Val	Glu	Phe	Asp	Leu
					150					155					160
Ala	Gln	Gln	Thr	Val	Ile	Asp	Ala	Lys	Asp	Ser	Lys	Ser	Phe	Asn	Cys
				165					170					175	
Arg	Ile	Glu	Tyr	Glu	Lys	Val	Asp	Lys	Ala	Thr	Lys	Asn	Thr	Leu	Cys
			180					185					190		
Asn	Tyr	Asp	Pro	Ser	Lys	Thr	Cys	Tyr	Gln	Glu	Gln	Thr	Gln	Ser	His
			195				200					205			
Val	Ser	Trp	Leu	Cys	Ser	Lys	Pro	Phe	Lys	Val	Ile	Cys	Ile	Tyr	Ile
			210				215				220				
Ser	Phe	Tyr	Ser	Thr	Asp	Tyr	Lys	Leu	Val	Gln	Lys	Val	Cys	Pro	Asp
					230					235				240	
Tyr	Asn	Tyr	His	Ser	Asp	Thr	Pro	Tyr	Phe	Pro	Ser	Gly			

245

250

<210> 5661

<211> 578

<212> DNA

<213> Homo sapiens

<400> 5661

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 120
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<210> 5662

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5662

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Cys	Leu	Gly	Ala	Cys	Lys	Ser	Arg	Ala	Pro	Trp	Glu	Pro	Trp	Cys	Met
			20					25					30		
Gly	Pro	Ile	Thr	Gln	Cys	Thr	Ala	Arg	Thr	Gln	Gln	Glu	Ala	Pro	Ala
			35				40					45			
Thr	Gly	Pro	Asp	Leu	Pro	His	Pro	Gly	Pro	Asp	Gly	His	Leu	Asp	Thr
			50			55					60				
His	Ser	Gly	Leu	Ser	Ser	Asn	Ser	Ser	Met	Thr	Thr	Arg	Glu	Leu	Gln
					70				75					80	
Gln	Tyr	Trp	Gln	Asn	Gln	Lys	Cys	Arg	Trp	Lys	His	Val	Lys	Leu	Leu
			85					90					95		
Phe	Glu	Ile	Ala	Ser	Ala	Arg	Ile	Glu	Glu	Arg	Lys	Val	Ser	Lys	Phe
			100					105					110		
Val	Met	Gly	Lys	Ser	Arg	Pro	Gly	Glu	Met	Thr	Tyr	Pro	Gly	Ser	Arg
			115				120					125			
Gly	Glu	Thr	Gly	Thr	Ala	Pro	Glu	Pro	Asp	Pro	Arg	Cys	Pro	Arg	Gln
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Ser	Asp	Met	Leu												

145

<210> 5663

<211> 857

<212> DNA

<213> Homo sapiens

<400> 5663

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120
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240
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tggtctctgg taagagatga tcagggtgca gttggcgtgg gcaaagctca gcaaggcgtc
360
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420
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480
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540
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720
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<210> 5664

<211> 203

<212> PRT

<213> Homo sapiens

<400> 5664

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      20             25            30
Gly Lys Glu Met Ala Glu Glu Tyr Asp Glu Lys Thr Ser Glu Leu Leu
      35             40            45
Val Arg Lys Trp Arg Val Lys Ser Ala Leu Gly Ala Met Gly Gln Trp
      50             55            60
Gln Leu Glu Val Gly Asp Pro Ala Pro Leu Gly Ala Gly Asn Leu Gly

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65          70          75          80
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          100          105          110
Lys Asp Val Tyr Ser Val Ser Val Asp Gln Lys Glu Arg Cys Ile Ile
          115          120          125
Val Arg Thr Thr Asn Lys Lys Tyr Tyr Lys Lys Phe Ser Ile Pro Asp
          130          135          140
Leu Asp Arg His Gln Leu Pro Leu Asp Asp Ala Leu Leu Ser Phe Ala
          145          150          155          160
His Ala Asn Cys Thr Leu Ile Ile Ser Tyr Gln Lys Pro Lys Glu Val
          165          170          175
Val Val Ala Glu Ser Glu Leu Gln Lys Glu Leu Lys Lys Val Lys Thr
          180          185          190
Ala His Ser Asn Asp Gly Asp Cys Lys Thr Gln
          195          200

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<210> 5665
 <211> 531
 <212> DNA
 <213> Homo sapiens

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<400> 5665
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120
cagcgccct ctgaagtcac ttgcttcacg gaggtgttac tgtctgctgc tggacagagc
180
atgatggggg ctgcaagggc tccctcaaac cctggactcc tccaacagag ggctcctggt
240
tgccaggctc agctctgccc tgcgtcggcc ccagggcgta gggaggggtgt ttaatcctgg
300
cccgggcctt ccccgaggt ggagcgcgtg tcgcacccgc tgctgcagca gcagtatgag
360
ctgtaccggg agcgcctgct gcagcgatgc gagcggcgcc cggaggagca ggtgctgtac
420
cacggcacga cggcaccggc agtgctgac atctgcgccc acggcttcaa ccgcagcttc
480
tgcgccgca acgccacggt ctacgggaag ggcgtgtatt tcgccaggcg c
531

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<210> 5666
 <211> 79
 <212> PRT
 <213> Homo sapiens

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<400> 5666
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1          5          10          15
Leu Gln Gln Gln Tyr Glu Leu Tyr Arg Glu Arg Leu Leu Gln Arg Cys
20          25          30
Glu Arg Arg Pro Val Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro

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35 40 45
 Ala Val Pro Asp Ile Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly
 50 55 60
 Arg Asn Ala Thr Val Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg
 65 70 75

<210> 5667

<211> 858

<212> DNA

<213> Homo sapiens

<400> 5667

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 120
 tttgagaagt taagaatgat ttccaaggaa atccgccaag ttgttcgaat gacttctgct
 180
 aacatggacc cagctatgat gtttcgacag aggtcactga gtcaaggaag cacaattca
 240
 aacatgctgg atgttcaggg aggtgctcac aaaaaaaggg cagccgcag ctctctgctt
 300
 aatgccaaga agctatatga ggatgccccaa atggcaagga aggtgaagca gtatctttcc
 360
 agtctcgatg tagagacaga tgaggagaag ttccagatga tgtcattaca gntggagcct
 420
 gcatatggta cctgtgagta caagttttca tttatgtgac gctaaagagc acaacaaaat
 480
 aaaaacttat ttctctagaa ttatacctaa gtcccaagaa aattaacttt cactcacaaa
 540
 agattgctgg cataccttaa gcatcatgtg atccaattaa tcacagactg aatcccatcc
 600
 attcctgatg gctacactat ccaaaaaata gagggataag tagatcttta aaaagctttt
 660
 taattctttt aaaaactgga tcattataga ggaggctttc tgtttgagaa catttttata
 720
 ttcattcccta aagagtaaac ataagtggaa tttttacctc tttttatttc atggataata
 780
 tttaccaact agaaaatata agaaatttga ttaaaacacc agtgataata ggtagcttac
 840
 aggtgccagt agtaaggt
 858

<210> 5668

<211> 152

<212> PRT

<213> Homo sapiens

<400> 5668

Xaa Ser Ala Arg Gly Ser Gln Ser Met Gln Pro Pro Ile Ile Pro Leu
 1 5 10 15
 Phe Pro Val Val Lys Lys Asp Met Thr Phe Leu His Glu Gly Asn Asp
 20 25 30
 Ser Lys Val Asp Gly Leu Val Asn Phe Glu Lys Leu Arg Met Ile Ser

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<210> 5669
<211> 1842
<212> DNA
<213> Homo sapiens
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4840

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 1020
 ctgtatgagg aatcaatgaa cacagtacta gtacaagagg tcattaggta caatcggctg
 1080
 ctgcaggtga tcacacagac actgcaagac ctactcaagg cactcaaggg gctggtagtg
 1140
 atgtcctctc agctggagct gatggctgcc agcctgtaca acaatactgt gcctgagctc
 1200
 tggagtgcc aaggctaccc atcgtcgaag cctctgtcat catgggtcat ggacctgctg
 1260
 caacgcctgg actttctgca ggcctggatc caagatggca tcccagctgt cttctggatc
 1320
 agtggattct tcttccccca ggctttctta acaggcactc tgcagaattt tgcccga
 1380
 tttgtcatct ccattgacac catctccttt gatttcaagg tgatgtttga ggcaccatca
 1440
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 1500
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 1560
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 1620
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 1680
 accaactatg tcattgctgt ggagatcccc acccatcagc cccagcgaca ctggataaag
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 cgtgggtggtg ccctcatctg tgcctggac tactagactc agacagaagg gctggggcca
 1800
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 1842

<210> 5670

<211> 591

<212> PRT

<213> Homo sapiens

<400> 5670

Phe	Val	Leu	Ser	Pro	Gly	Thr	Asp	Pro	Ala	Ala	Asp	Leu	Tyr	Lys	Phe
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Ala	Glu	Glu	Met	Lys	Phe	Ser	Lys	Lys	Leu	Ser	Ala	Ile	Ser	Leu	Gly
			20					25					30		
Gln	Gly	Gln	Gly	Pro	Arg	Ala	Glu	Ala	Met	Met	Arg	Ser	Ser	Ile	Glu
		35					40					45			
Arg	Gly	Lys	Trp	Val	Phe	Phe	Gln	Asn	Cys	His	Leu	Ala	Pro	Ser	Trp
	50					55					60				
Met	Pro	Ala	Leu	Glu	Arg	Leu	Ile	Glu	His	Ile	Asn	Pro	Asp	Lys	Val
65					70					75				80	
His	Arg	Asp	Phe	Arg	Leu	Trp	Leu	Thr	Ser	Leu	Pro	Ser	Asn	Lys	Phe
				85					90					95	
Pro	Val	Ser	Ile	Leu	Gln	Asn	Gly	Ser	Lys	Met	Thr	Ile	Glu	Pro	Pro
			100					105					110		
Arg	Gly	Val	Arg	Ala	Asn	Leu	Leu	Lys	Ser	Tyr	Ser	Ser	Leu	Gly	Glu
		115				120						125			
Asp	Phe	Leu	Asn	Ser	Cys	His	Lys	Val	Met	Glu	Phe	Lys	Ser	Leu	Leu

130	135	140
Leu Ser Leu Cys Leu Phe His Gly Asn Ala Leu Glu Arg Arg Lys Phe		
145	150	155
Gly Pro Leu Gly Phe Asn Ile Pro Tyr Glu Phe Thr Asp Gly Asp Leu		
	165	170
Arg Ile Cys Ile Ser Gln Leu Lys Met Phe Leu Asp Glu Tyr Asp Asp		
	180	185
Ile Pro Tyr Lys Val Leu Lys Tyr Thr Ala Gly Glu Ile Asn Tyr Gly		
	195	200
Gly Arg Val Thr Asp Asp Trp Asp Arg Arg Cys Ile Met Asn Ile Leu		
	210	215
Glu Asp Phe Tyr Asn Pro Asp Val Leu Ser Pro Glu His Ser Tyr Ser		
225	230	235
Ala Ser Gly Ile Tyr His Gln Ile Pro Pro Thr Tyr Asp Leu His Gly		
	245	250
Tyr Leu Ser Tyr Ile Lys Ser Leu Pro Leu Asn Asp Met Pro Glu Ile		
	260	265
Phe Gly Leu His Asp Asn Ala Asn Ile Thr Phe Ala Gln Asn Glu Thr		
	275	280
Phe Ala Leu Leu Gly Thr Ile Ile Gln Leu Gln Pro Lys Ser Ser Ser		
	290	295
Ala Gly Ser Gln Gly Arg Glu Glu Ile Val Glu Asp Val Thr Gln Asn		
305	310	315
Ile Leu Leu Lys Val Pro Glu Pro Ile Asn Leu Gln Trp Val Met Ala		
	325	330
Lys Tyr Pro Val Leu Tyr Glu Glu Ser Met Asn Thr Val Leu Val Gln		
	340	345
Glu Val Ile Arg Tyr Asn Arg Leu Leu Gln Val Ile Thr Gln Thr Leu		
	355	360
Gln Asp Leu Leu Lys Ala Leu Lys Gly Leu Val Val Met Ser Ser Gln		
	370	375
Leu Glu Leu Met Ala Ala Ser Leu Tyr Asn Asn Thr Val Pro Glu Leu		
385	390	395
Trp Ser Ala Lys Ala Tyr Pro Ser Leu Lys Pro Leu Ser Ser Trp Val		
	405	410
Met Asp Leu Leu Gln Arg Leu Asp Phe Leu Gln Ala Trp Ile Gln Asp		
	420	425
Gly Ile Pro Ala Val Phe Trp Ile Ser Gly Phe Phe Phe Pro Gln Ala		
	435	440
Phe Leu Thr Gly Thr Leu Gln Asn Phe Ala Arg Lys Phe Val Ile Ser		
	450	455
Ile Asp Thr Ile Ser Phe Asp Phe Lys Val Met Phe Glu Ala Pro Ser		
465	470	475
Glu Leu Thr Gln Arg Pro Gln Val Gly Cys Tyr Ile His Gly Leu Phe		
	485	490
Leu Glu Gly Ala Arg Trp Asp Pro Glu Ala Phe Gln Leu Ala Glu Ser		
	500	505
Gln Pro Lys Glu Leu Tyr Thr Glu Met Ala Val Ile Trp Leu Leu Pro		
	515	520
Thr Pro Asn Arg Lys Ala Gln Asp Gln Asp Phe Tyr Leu Cys Pro Ile		
	530	535
Tyr Lys Thr Leu Thr Arg Ala Gly Thr Leu Ser Thr Thr Gly His Ser		
545	550	555
Thr Asn Tyr Val Ile Ala Val Glu Ile Pro Thr His Gln Pro Gln Arg		

565 570 575
 His Trp Ile Lys Arg Gly Val Ala Leu Ile Cys Ala Leu Asp Tyr
 580 585 590
 <210> 5671
 <211> 818
 <212> DNA
 <213> Homo sapiens
 <400> 5671
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 120
 gttgcctatc tttgtcctct ctcttcgggc ttcgagatga atgtgcagcc ctgttctagg
 180
 tgtgggtatg gggtttatcc tgccgagaag atcagctgta tagatcagat atggcataaa
 240
 gcctgttttc actgtgaagt ttgcaagatg atgctgtctg ttaataaact tgtgagtcac
 300
 cagaaaaagc cgtactgtca cgcccataac cctaagaaca acactttcac cagtgtctat
 360
 cacactccat taaatctaaa tgtgaggaca tttccagagg ccatcagtg gatccatgac
 420
 caagaagatg gtgaacagtg taaatcagtt tttcattggg acatgaaatc caaggataag
 480
 gaagggtcac ctaacaggca gccactggca aatgagagag cctattggac tggatatggg
 540
 gaaggggaatg cttggtgccc aggagctctg ccagaccccg aaattgtaag gatggttgag
 600
 gctcgaaagt ctcttggtga ggaatataca gaagactatg agcaaccag gggcaagggg
 660
 agctttccag ccatgatcac acctgcttat caaagggcca agaaagccaa ccagctggcc
 720
 agccaagtgg agtataagag agggcatgat gaacgcatct ccaggttctc cacggtggcg
 780
 gatactcctg agctgctacg gagcaaggct tggggcac
 818

<210> 5672
 <211> 220
 <212> PRT
 <213> Homo sapiens

<400> 5672
 Met Asn Val Gln Pro Cys Ser Arg Cys Gly Tyr Gly Val Tyr Pro Ala
 1 5 10 15
 Glu Lys Ile Ser Cys Ile Asp Gln Ile Trp His Lys Ala Cys Phe His
 20 25 30
 Cys Glu Val Cys Lys Met Met Leu Ser Val Asn Asn Phe Val Ser His
 35 40 45
 Gln Lys Lys Pro Tyr Cys His Ala His Asn Pro Lys Asn Asn Thr Phe
 50 55 60
 Thr Ser Val Tyr His Thr Pro Leu Asn Leu Asn Val Arg Thr Phe Pro
 65 70 75 80

Glu Ala Ile Ser Gly Ile His Asp Gln Glu Asp Gly Glu Gln Cys Lys
 85 90 95
 Ser Val Phe His Trp Asp Met Lys Ser Lys Asp Lys Glu Gly Ala Pro
 100 105 110
 Asn Arg Gln Pro Leu Ala Asn Glu Arg Ala Tyr Trp Thr Gly Tyr Gly
 115 120 125
 Glu Gly Asn Ala Trp Cys Pro Gly Ala Leu Pro Asp Pro Glu Ile Val
 130 135 140
 Arg Met Val Glu Ala Arg Lys Ser Leu Gly Glu Glu Tyr Thr Glu Asp
 145 150 155 160
 Tyr Glu Gln Pro Arg Gly Lys Gly Ser Phe Pro Ala Met Ile Thr Pro
 165 170 175
 Ala Tyr Gln Arg Ala Lys Lys Ala Asn Gln Leu Ala Ser Gln Val Glu
 180 185 190
 Tyr Lys Arg Gly His Asp Glu Arg Ile Ser Arg Phe Ser Thr Val Ala
 195 200 205
 Asp Thr Pro Glu Leu Leu Arg Ser Lys Ala Trp Gly
 210 215 220

<210> 5673

<211> 1279

<212> DNA

<213> Homo sapiens

<400> 5673

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 120
 ccgagacgat aaaagaacag ttgggtgttt ataggatgcc ctcaaagtga gctggctaag
 180
 tgagctgggc tctaacttca ctcaaaatt tatagtacag ctaagaaggc cagtctgtcc
 240
 atgaaaggga gccgagacaa gacgagggcg gcctcttcca ggcctgtgcc aagtgtcctt
 300
 ggggtcccg catggtccac acttctgcag catccgcaga acatgtggcc gggtcctgcc
 360
 cagcagcagg gacagccaag tgggaggcag gcatggtgca cacctgggga ggccctggt
 420
 gcagaagcag cccacagta gcagcccat ccagaggaag accactccgg agggccacag
 480
 gcctctgcag ccctggcact gccgcccagc cctccatctc agcgggatgt gcagggtgag
 540
 acaggaatgc agggacgttc tgcccctagg tcagcctctt catccgcctg ttgtgcttcg
 600
 atggtcaagg ttgccctgtc cacagctgct gcaacgccat ccagggttc gtcttgtctc
 660
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 720
 cctgggtatc tgcctcagaa agggctggca ggcttgtctg cagggtcagt gctgtgccct
 780
 cctggtctcc tgcgggtggc tcacggtgca gggtacggcc catcagcca gatgtgcat
 840

gccagactga gcagctcttc tctgcggggg aagaggttct tgcgcttctg agcaccaatg
 900
 catctttctaa cagctccatc ttcttgetga actgcacttc taaaatgggg ataacctctg
 960
 gcatcttggc agatatcaaa cgataggcca tgtctggctt tccaataaac cgctggcgga
 1020
 tgctaatttc gtaagggtgag tggaccttga tgcgtccac gtcttctctt tcaaacctgt
 1080
 gcatgagcaa agaactggag tcatgtattt ccaacccaga cacaaggacg gtgagcctcc
 1140
 ctggtttaac gtgagactct gttctgtggg aaataacagc aggaattttt atcagtatcc
 1200
 cttctttccc aaagggttca caactgggtca tggagacatc ttccctgggc tttgtttccg
 1260
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 1279

<210> 5674

<211> 81

<212> PRT

<213> Homo sapiens

<400> 5674

Leu	His	Ser	Gln	Ile	Tyr	Ser	Thr	Ala	Lys	Lys	Ala	Ser	Leu	Ser	Met
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Lys	Gly	Ser	Arg	Asp	Lys	Thr	Arg	Ala	Ala	Ser	Ser	Arg	Pro	Val	Pro
			20					25					30		
Ser	Val	Leu	Gly	Val	Pro	Pro	Trp	Ser	Thr	Leu	Leu	Gln	His	Pro	Gln
		35					40					45			
Asn	Met	Trp	Pro	Gly	Pro	Ala	Gln	Gln	Gln	Gly	Gln	Pro	Ser	Gly	Arg
	50					55				60					
Gln	Ala	Trp	Cys	Thr	Pro	Gly	Glu	Ala	Pro	Gly	Ala	Glu	Ala	Ala	Pro
65					70					75					80
Gln															

<210> 5675

<211> 1074

<212> DNA

<213> Homo sapiens

<400> 5675

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 120
 gggctggggc aggggctgag gctgaaagca gcagcctgcc tagtggggtga cgccaggggc
 180
 cggtgtaaca tggcaccgag gttggggcca cagcaatgtg tgggacggtg ggggtgggctg
 240
 gggcccttgg ctccaagcat tagttctcca agctctggtc cgttctccta cctccttcaa
 300
 ggggcaccag ggctacaagg tggtagtga gtattggggc ccgactcctg gggcactgga
 360

gtggtctcta ggcccaggc cccaaggaga gggctgggtt tctgggagag tgctggctct
 420
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 480
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 540
 aaccgcatgc ccagtgggta ctgcacggag ctgtaggagg tcacagtgt gtgtacagg
 600
 ctgtcactgt ccatagggat gactgccacg tcgcagggt gccgtgctgg tggcagatgt
 660
 ggctgggcct gtgcctgctt ccggaggcag cagaaccgga cacaaccagc tgtgacacca
 720
 cacagcagaa gcaggaggac cgccagcagg atgagcctag gagagcaagg ctctaccact
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 900
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 960
 ggccttgggc tcaactccag gactcgtgt cctcagcag tgccccactg ctgagcggga
 1020
 tcgtagggga ctcccgcgga ggccaggcgg gagagtggg aggggaaggc ctgg
 1074

<210> 5676

<211> 145

<212> PRT

<213> Homo sapiens

<400> 5676

Glu	Val	Thr	Val	Leu	Cys	Thr	Gly	Leu	Ser	Leu	Ser	Ile	Gly	Met	Thr
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Ala	Thr	Ser	Gln	Gly	Cys	Arg	Ala	Gly	Gly	Arg	Cys	Gly	Trp	Ala	Cys
			20					25					30		
Ala	Cys	Phe	Arg	Arg	Gln	Gln	Asn	Arg	Thr	Gln	Pro	Ala	Val	Thr	Pro
		35					40					45			
His	Ser	Arg	Ser	Arg	Arg	Thr	Ala	Ser	Arg	Met	Ser	Leu	Gly	Glu	Gln
	50					55					60				
Gly	Ser	Thr	Thr	Gly	Leu	Thr	Leu	Gly	His	Arg	Ala	Pro	Ala	Pro	Trp
65					70				75					80	
Gly	Met	Ser	Trp	His	Asn	His	Arg	Arg	Gln	Val	Asn	Arg	Ile	Lys	Ser
				85					90					95	
Arg	Gln	Cys	Leu	Ser	Met	Ser	Glu	Thr	Ala	Val	Ala	Arg	Ala	Trp	Pro
			100					105					110		
Arg	Ala	Ala	Gly	Pro	Ala	Leu	Ala	Ile	Ser	Pro	Gly	Leu	Ala	Arg	Gly
		115				120						125			
Gly	Leu	Gly	Leu	Thr	Pro	Arg	Thr	Arg	Cys	Pro	Gln	Arg	Val	Pro	His
	130					135					140				

Cys
 145

<210> 5677

<211> 477

<212> DNA

<213> Homo sapiens

<400> 5677

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120
agggaaagca agatgcagca gtgaggccct ctctggtatc cattcattca cttcactcaa
180
cagctgttta tgaccatgag caatacaagc cttgtgaaga tcttgagca gggcacaagc
240
cgctgacgtc tgctccagtg agaagccctg ctgccttccc caattcgctt tctttccgca
300
gccgccgtg ccccgacccc ggatctgcat gtggaagtac ctggacgtcc attccatgca
360
ccagctggag aagaccacca atgctgagat gagggaggtg ctggctgagc tgctggagct
420
agggtgtcct gagcagagcc tgagcgacgc catcacctg gacctcttct gccgcgg
477

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<210> 5678

<211> 151

<212> PRT

<213> Homo sapiens

<400> 5678

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Met Ala Ser Leu Arg Leu Cys Ser Gly His Pro Ser Ser Ser Ser Ser
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Ala Ser Thr Ser Leu Ile Ser Ala Leu Val Val Phe Ser Ser Trp Cys
20           25           30
Met Glu Trp Thr Ser Arg Tyr Phe His Met Gln Ile Arg Gly Arg Gly
35           40           45
Ser Gly Gly Cys Gly Lys Lys Ala Asn Trp Gly Arg Gln Gln Gly Phe
50           55           60
Ser Leu Glu Gln Thr Ser Ala Ala Cys Ala Leu Leu Gln Asp Leu His
65           70           75           80
Lys Ala Cys Ile Ala His Gly His Lys Gln Leu Leu Ser Glu Val Asn
85           90           95
Glu Trp Ile Pro Glu Arg Ala Ser Leu Leu His Leu Ala Phe Pro Thr
100          105          110
Ser Asn Pro Leu Gly Gln Arg Gly Gly Val Leu Pro Leu Leu His Gln
115          120          125
Cys Pro Phe Leu Pro Trp Ser Gln Ala Ala Ser Phe Gln His Arg Pro
130          135          140
Leu Gln Arg Gly Thr Ala Ala
145          150

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<210> 5679

<211> 665

<212> DNA

<213> Homo sapiens

<400> 5679

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 120
 tccacctccc agcatgctgg ctccaattcc acctctcagc agcctagccc tgaatccaca
 180
 ccacagcagc ctagtcctga atccacacca cagcagccta gccctgaatc cacaccacag
 240
 cattccagcc ttgaaaccac ctcccggcag ccagcattcc aagcccttcc agcaccgaa
 300
 atccgcccgt cctcttgctg ccttttatct ccagatgcta acgtgaaggc agccctcaa
 360
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 420
 gccctcgaa ctgtggctgt ggctctgggg gctctaggag ctgcctacta catcactgaa
 480
 tccttgtaaa caagccccta ggcccacagt ctggcagacc tccaccagcc ccaggagttg
 540
 ataggtgatg ggcgtgggag aagatgttca gaatatctca aaagccaagt ccagaagatc
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 660
 aaaaa
 665

<210> 5680
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 5680
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 Ser Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln Gln Pro Ser Pro Glu
 35 40 45
 Ser Thr Pro Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln His Ser Ser
 50 55 60
 Leu Glu Thr Thr Ser Arg Gln Pro Ala Phe Gln Ala Leu Pro Ala Pro
 65 70 75 80
 Glu Ile Arg Arg Ser Ser Cys Cys Leu Leu Ser Pro Asp Ala Asn Val
 85 90 95
 Lys Ala Ala Pro Gln Ser Arg Lys Ala Glu Asn Leu Gln Glu Asn Pro
 100 105 110
 Pro Val Ile Val Thr Arg Val Leu Gln Ala Leu Gly Thr Val Ala Val
 115 120 125
 Ala Leu Gly Ala Leu Gly Ala Ala Tyr Tyr Ile Thr Glu Ser Leu
 130 135 140

<210> 5681
 <211> 1402
 <212> DNA
 <213> Homo sapiens

<400> 5681

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gtcgggacct gggttccggg catgagctga gagcaccacg ccgaggccac gagtatttca
120
tagacattga tggaagcaga aacaaaaact ctccccctgg agaatgcac catcctttca
180
gagggctctc tgcaggaagg acaccgatta tggattggca acctggaccc caaaattacc
240
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300
ttccacaagt caggtgcttt ggagggacag cctcgaggct actgttttgt taactttgaa
360
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420
aagctggtgg tgcgatggc acatgctcaa gtaaagagat atgatacata caagaatgat
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600
gatgcagagt atccagcagc gctgttttat tctacttta agccaccaga taaaaaagg
660
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720
gcagcaaaag caaattggct tccacaccta aaatcgtctg cctgtgtact ttgtagatgt
780
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900
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960
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1020
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1080
tacgctcgtg tgtcttttac aacataaaga aaaagtaaaa ggcagggagg gaagtgagag
1140
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1200
ctggactgaa aaagagaaag ttcttggcaa aaaggagctg attctttgaa caaatgttgt
1260
agtaatctgt ttaagaatta tgcttattgt ttcaaaatcc caactaggaa aacatggtgt
1320
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1380
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1402

<210> 5682

<211> 190

<212> PRT

<213> Homo sapiens

<400> 5682

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Met Glu Ala Glu Thr Lys Thr Leu Pro Leu Glu Asn Ala Ser Ile Leu
 1          5          10          15
Ser Glu Gly Ser Leu Gln Glu Gly His Arg Leu Trp Ile Gly Asn Leu
 20          25          30
Asp Pro Lys Ile Thr Glu Tyr His Leu Leu Lys Leu Leu Gln Lys Phe
 35          40          45
Gly Lys Val Lys Gln Phe Asp Phe Leu Phe His Lys Ser Gly Ala Leu
 50          55          60
Glu Gly Gln Pro Arg Gly Tyr Cys Phe Val Asn Phe Glu Thr Lys Gln
 65          70          75          80
Glu Ala Glu Gln Ala Ile Gln Cys Leu Asn Gly Lys Leu Ala Leu Ser
 85          90          95
Lys Lys Leu Val Val Arg Trp Ala His Ala Gln Val Lys Arg Tyr Asp
100          105          110
His Asn Lys Asn Asp Lys Ile Leu Pro Ile Ser Leu Glu Pro Ser Ser
115          120          125
Ser Thr Glu Pro Thr Gln Ser Asn Leu Ser Val Thr Ala Lys Ile Lys
130          135          140
Ala Ile Glu Ala Lys Leu Lys Met Met Ala Glu Asn Pro Asp Ala Glu
145          150          155          160
Tyr Pro Ala Ala Pro Val Tyr Ser Tyr Phe Lys Pro Pro Asp Lys Lys
165          170          175
Arg Thr Thr Pro Tyr Ser Arg Thr Ala Trp Lys Ser Arg Arg
180          185          190

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<210> 5683

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5683

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ggatccatgc gttgccctag ggaggcctca gctgtcaagc actgaccatc tctgcagaca
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cgcagggctg acctgtactg gtgagtaagc attagccatg ggacgcacac aatccagcca
120
atgctttcag aaggcaccac atgtgatgca cagcctctat ttacatgtga ataattacac
180
tgctgctttc tggttaaaag tagggaaata cagtgttcca gggcatagga atgggtgctct
240
gggtagaaaa gtttattttg ctggtgggag gcagggtttg ttaataaagc tttgaaatac
300
acaaatttca ttctggatgc tgatgctg
328

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<210> 5684

<211> 103

<212> PRT

<213> Homo sapiens

<400> 5684

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Met Lys Phe Val Tyr Phe Lys Ala Leu Leu Thr Lys Pro Ala Ser His

```

```

      1           5           10           15
Gln Gln Asn Lys Leu Phe Tyr Pro Glu His His Ser Tyr Ala Leu Glu
      20           25           30
His Cys Ile Ser Leu Leu Leu Thr Arg Lys Gln Gln Cys Asn Tyr Ser
      35           40           45
His Val Asn Arg Gly Cys Ala Ser His Val Val Pro Ser Glu Ser Ile
      50           55           60
Gly Trp Ile Val Cys Val Pro Trp Leu Met Leu Thr His Gln Tyr Arg
      65           70           75           80
Ser Ala Leu Arg Val Cys Arg Asp Gly Gln Cys Leu Thr Ala Glu Ala
      85           90           95
Ser Leu Gly Gln Arg Met Asp
      100

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<210> 5685
 <211> 604
 <212> DNA
 <213> Homo sapiens

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<400> 5685
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ctggcctacg agtctgacgg gatcgtggtt tccaacgaca cataccgtga cctccaaggc
120
gagcggcagg agtggaagcg cttcatcgag gagcggctgc tcatgtactc cttcgtcaat
180
gacaagtatg ttccctccca gaggcctga cagacttggg gtccacaggg gaagccagag
240
gtgcccttgg caaggggtgga gctgggggct gggctctgcg gggccctgtg gccatgggag
300
gttgccgggtc ttggctccag gcagctttga gagtgagacg gatagctcac cacataggag
360
aatcagacc gggaccaggc aggctgtggg gtggagagag tggctaattt gggagataga
420
gccgtagcac ttatgagggg atgtatgtgg ttgatggttc caggtggcct ctctacgaac
480
caacatggca tctctcgagc agaggccatg ggccagtggg tgccgggctgc catccccga
540
cgacttcagg gagggagtgc ccctaaaggt gcccatgggc tgtggccctc tagaccgggg
600
atcc
604

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<210> 5686
 <211> 69
 <212> PRT
 <213> Homo sapiens

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<400> 5686
Pro Cys Ser Arg Val Gly Gly Lys Arg Val Val Cys Tyr Asp Asp Arg
1           5           10           15
Phe Ile Val Lys Leu Ala Tyr Glu Ser Asp Gly Ile Val Val Ser Asn
      20           25           30
Asp Thr Tyr Arg Asp Leu Gln Gly Glu Arg Gln Glu Trp Lys Arg Phe

```

35 40 45
 Ile Glu Glu Arg Leu Leu Met Tyr Ser Phe Val Asn Asp Lys Tyr Val
 50 55 60
 Pro Ser Gln Arg Pro
 65

<210> 5687
 <211> 328
 <212> DNA
 <213> Homo sapiens

<400> 5687
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 ccccggtctct gcatgcacgc ctgctgaac acccgggct cttccggtg cacctgcccc
 120
 ggtggatccg aaactctggc tgacgggaag agctgtgaga atgtggatga atgtgtgggc
 180
 ctgcagccgg tgtgccccca ggggaccaca tgcataca cgggtggaag cttccagtgt
 240
 gtcagccctg agtgcctcga gggcagcggc aatgtgagct acgtgaagac gtctccattc
 300
 cagtgtgagc ggaaccctg ccccatgg
 328

<210> 5688
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 5688
 Thr Leu Ser Arg Pro Arg Gly Ala Gly Lys Gly Gly Gly Asp Gly Gly
 1 5 10 15
 Gly Gly Glu Arg Pro Arg Leu Cys Met His Ala Cys Val Asn Thr Pro
 20 25 30
 Gly Ser Ser Arg Cys Thr Cys Pro Gly Gly Ser Glu Thr Leu Ala Asp
 35 40 45
 Gly Lys Ser Cys Glu Asn Val Asp Glu Cys Val Gly Leu Gln Pro Val
 50 55 60
 Cys Pro Gln Gly Thr Thr Cys Ile Asn Thr Gly Gly Ser Phe Gln Cys
 65 70 75 80
 Val Ser Pro Glu Cys Pro Glu Gly Ser Gly Asn Val Ser Tyr Val Lys
 85 90 95
 Thr Ser Pro Phe Gln Cys Glu Arg Asn Pro Cys Pro Met
 100 105

<210> 5689
 <211> 1897
 <212> DNA
 <213> Homo sapiens

<400> 5689
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 60

tgaacaatca gaatcataga agagtgtgag cactggtcct ttgtcttcca ggtgggacag
120
tgtgtggtgg tcttcagcca ggctcctagt gggagagccc cactcagccc cagtttgaac
180
tctcgcccat cacctatcag tgccactncc tccagctctc gttcctgaaa cccgagagta
240
ccgctctcag tctccagtaa gaagcatgga tgaagctcct tgtgttaacg gccgctgggg
300
aacactgaga cccagggctc aaaggcagac tcctcagggt cccgggaagg gagcctttcc
360
ccagccagag gagacggctc tcctatcctc aatgggtggga gtttgtctcc aggaacggca
420
gctgtgggtg gctcttcttt ggacagtcct gtacaggcca tatctccaag tactccatct
480
gctgctgaag gatacgacct gaaaatagga ctttctttgg cccccgacg aggatcaacc
540
agatcagaaa gatctgagat taggatccat agatctgaat tgggatctaa acccgcttcc
600
agtagtaatc ccatggatgg catggacaat aggacagttg ggggaagtat gagacacct
660
cctgaacaga caaatggtgt gcatacccca cctcacgtgg ccagtgcctt tgcaggggccc
720
gtctccccag gtgccctgcg tcggagtcctg gaagccatca aagcgatgtc ctccaaaggc
780
ccctcggcct ctgcagcact aagtcctcct cttgggtctt ctccaggctc tcctgggagc
840
cagagtttga gcagtggaga aacagtgcc atccctcgcc cagggcctgc ccaaggagat
900
ggacattcct tacctcccat tgctcgccgc ctgggccacc accctccaca gtccctaaat
960
gttggcaaac ccctatacca gagtatgaac tgcaagccca tgcagatgta cgtgctggac
1020
attaaagaca ccaaggagaa ggggggggtc aaatggaaag tatttaatag cagttctgtg
1080
gttggacctc ctgaaaccag cctgcatacc gtggtacaag gcaggggtga actcatcata
1140
tttggaggac tcatggacaa gaaacagaat gtgaagtact atccaaaaac aaacgccttg
1200
tactttgtac gagcaaagag ataatgtgtt ctaaaccctt ttcttttct gtggctttta
1260
atttgaatt ttccagtgtg taagcatttg gactgagaat tgggaaaaca aaattactcc
1320
cagaagccaa aactctttta ttcccaaccg aagtcactcc aggcctgggat caaatctcca
1380
ttaagaaaaa aaattatata taaatatata tatatatatt atatagccaa ctctgttgac
1440
aaaaaaaggg agagatttcc atcctgggtc agataaagtt gttgctgtgt tttaacaggg
1500
gctgggctgc ctttttctac cttgctggta actagaccaa gaagttagag aatagactaa
1560
catcagtaac ttcccaaaag aaactgaaga gcccctgta aatctttatg tggccttctt
1620
ggagttaaaa aatgaaaggg catatgtaag ttgcaaagggt ggagggtttt agactctcat
1680

gcttcagggtg ctgtcgggggt aaaagtaact gtttttcccc ttctcttaaa accacagagg
 1740
 acctgtgaca gctctgcaga aatgccagtg cctggccccc tcttgccctt tatggctgag
 1800
 gaaagttacc caacaaagga ttttattcca catttgtgtg ccgggtcatt gtgaaataat
 1860
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 1897

<210> 5690

<211> 54

<212> PRT

<213> Homo sapiens

<400> 5690

Thr	Ile	Arg	Ile	Ile	Glu	Glu	Cys	Glu	His	Trp	Ser	Phe	Val	Phe	Gln
1			5					10					15		
Val	Gly	Gln	Cys	Val	Val	Val	Phe	Ser	Gln	Ala	Pro	Ser	Gly	Arg	Ala
		20					25					30			
Pro	Leu	Ser	Pro	Ser	Leu	Asn	Ser	Arg	Pro	Ser	Pro	Ile	Ser	Ala	Thr
		35					40					45			
Xaa	Ser	Ser	Ser	Arg	Ser										
		50													

<210> 5691

<211> 1227

<212> DNA

<213> Homo sapiens

<400> 5691

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 aaccgtcctg tggaggtgta ccagtacagc acagaaccca tcaacacatt ccatgggata
 120
 catcaaaacg aggacgaacc cattcgtgtt agctaccatc ggaatatcca ctataattca
 180
 gtggtgaatc ctaacaaggc caccattggt gtggggctgg gctgccatca ttcaaaccag
 240
 ggtttgcaga gcagtctctg atgaagaatg ccataaaaac atcggaggag tcatggattg
 300
 aacagcagat gctagaagac aagaaacggg ccacagactg ggaggccaca aatgaagcca
 360
 tcgaggagca ggtggctcgg gaatcctacc tgcagtgggt gcgggatcag gagaaacagg
 420
 ctgcgcaggt ccgaggcccc agccagcccc ggaaagccag cgccacatgc agttcggcca
 480
 cagcagcagc ctccagtggc ctggaggagt ggactagccg gtccccgcgg cagcggagtt
 540
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 600
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 660
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 720

agtgccgggc cctcattcag cagatgtccc cctctgcctt tggctctgaat gactgggatg
 780
 atgatgagat cctagcttcg gtgctggcag tgtcccaaca ggaataccta gacagtatga
 840
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 900
 ggacaccatc tcccaacccc agggattcgg gcaagggtgc cgaagataga caagaggcac
 960
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 1020
 aaagtctccc tgccctcat tccttccaag atgagaaaaa cttgccgcca cccccgaca
 1080
 ctgatgccag ggaggtggga ggaagaagtg ggaaatttcc cttcccagta cccccaagaa
 1140
 cgtctgagcc ttcaatgttg aattttttct ttattaaaat tacttttate ttataaaatc
 1200
 aactaatcaa aaatgaaaaa aaaaaaa
 1227

<210> 5692

<211> 86

<212> PRT

<213> Homo sapiens

<400> 5692

Lys	Arg	Lys	Asn	Asn	Cys	His	Gly	Asn	His	Ile	Glu	Met	Gln	Ala	Met
1			5					10					15		
Ala	Glu	Met	Tyr	Asn	Arg	Pro	Val	Glu	Val	Tyr	Gln	Tyr	Ser	Thr	Glu
			20					25					30		
Pro	Ile	Asn	Thr	Phe	His	Gly	Ile	His	Gln	Asn	Glu	Asp	Glu	Pro	Ile
			35				40					45			
Arg	Val	Ser	Tyr	His	Arg	Asn	Ile	His	Tyr	Asn	Ser	Val	Val	Asn	Pro
			50				55				60				
Asn	Lys	Ala	Thr	Ile	Gly	Val	Gly	Leu	Gly	Cys	His	His	Ser	Asn	Gln
65					70				75					80	
Gly	Leu	Gln	Ser	Ser	Leu										
					85										

<210> 5693

<211> 389

<212> DNA

<213> Homo sapiens

<400> 5693

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 gacactgggg cacctctcgc cctgtcccaa ggccacgctg gctctcttca ggcccatggc
 120
 tccaaccccg cagggccctc cgtcggggcg tcccaactta gtcgtccctc gacgcccctc
 180
 ctggggcctc ccgggttggt gagctgacgg cagcttcccc ccacaggtgc ctctgagcct
 240
 cggaacatga tctacatgag ccgcttggtt atctggggcg agggcacacc cttccggaac
 300

tttgaggagt tcctgcacgc catcgagaag aggggcgttg gcgccatgga gatcgtggcc
 360
 atggacatga aggtcagcgg gcatgtaca
 389

<210> 5694
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 5694
 Arg Gln Leu Pro Pro Thr Gly Ala Ser Glu Pro Arg Asn Met Ile Tyr
 1 5 10 15
 Met Ser Arg Leu Gly Ile Trp Gly Glu Gly Thr Pro Phe Arg Asn Phe
 20 25 30
 Glu Glu Phe Leu His Ala Ile Glu Lys Arg Gly Val Gly Ala Met Glu
 35 40 45
 Ile Val Ala Met Asp Met Lys Val Ser Gly His Val
 50 55 60

<210> 5695
 <211> 1417
 <212> DNA
 <213> Homo sapiens

<400> 5695
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 cccccagata gggggactga tggcaaggcc cagctggtagg tgcactcggc ctttgagcag
 180
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 240
 acggtggggc cctggcgccg cacactgcct gcagagctgc gtgctcgct ggagcggtagc
 300
 catggtgtga gtgttgccct gcgtggtgac tgcaccatcc tccgtggctt cggggccac
 360
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 420
 gcctttccct tggcagcttc aggcctacc ttggcggggc agacgctgaa ggggccctgg
 480
 aacaacctgg agcgtctggc agagaacacc ggggagttcc aggaggtggg gcgggccttc
 540
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 600
 caccgctgc tgcagcagca gtatgagctg taccgggagc gcctgctgca gcgatgcgag
 660
 cggcgcccgg tggagcaggg gctgtaccac ggcacgacgg caccggcagt gcctgacatc
 720
 tgcgcccacg gcttcaaccg cagcttctgc ggccgcaacg ccacggtcta cgggaagggc
 780
 gtgtatttcg ccaggcgcg ctcctgtcg gtgcaggacc gctactcgcc ccccaacgcc
 840

gatggccata aggcggtgtt cgtggcacgg gtgctgactg gcgactacgg gcagggccgc
 900
 cgcggtctgc gggcgcccc tctgcgggggt cctggccacg tgctcctgcg ctacgacagc
 960
 gccgtggact gcatctgcca gcccagcate ttcgtcatct tccacgacac ccaggcgctg
 1020
 cccacccacc tcatcacctg cgagcacgtg ccccgcgctt ccccgacga cccctctggg
 1080
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 1140
 aggctccag ctcgcacag gctgatgctc cccgccccca actgtggccg cctgagctgt
 1200
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 1260
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 1320
 tcagcagagc ccaggagcga caccgccccg cgcgcgtcc cagacctcgc ccgagtcggc
 1380
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 1417

<210> 5696

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5696

Val	Ala	Leu	His	Arg	Ser	Leu	Lys	Pro	Gln	Gly	Gln	Val	Gly	Glu	Gln
1			5					10						15	
Glu	Glu	Ala	Gly	Ala	Leu	Arg	Gln	Ala	Leu	Thr	Phe	Ser	Leu	Leu	Glu
			20					25					30		
Gln	Pro	Pro	Leu	Glu	Ala	Glu	Glu	Pro	Pro	Asp	Arg	Gly	Thr	Asp	Gly
			35				40					45			
Lys	Ala	Gln	Leu	Val	Val	His	Ser	Ala	Phe	Glu	Gln	Asp	Val	Glu	Glu
			50			55					60				
Leu	Asp	Arg	Ala	Leu	Arg	Ala	Ala	Leu	Glu	Val	His	Val	Gln	Glu	Glu
65					70				75					80	
Thr	Val	Gly	Pro	Trp	Arg	Arg	Thr	Leu	Pro	Ala	Glu	Leu	Arg	Ala	Arg
			85					90					95		
Leu	Glu	Arg	Cys	His	Gly	Val	Ser	Val	Ala	Leu	Arg	Gly	Asp	Cys	Thr
			100					105					110		
Ile	Leu	Arg	Gly	Phe	Gly	Ala	His	Pro	Ala	Arg	Ala	Ala	Arg	His	Leu
			115				120					125			
Val	Ala	Leu	Leu	Ala	Gly	Pro	Trp	Asp	Gln	Ser	Leu	Ala	Phe	Pro	Leu
			130				135				140				
Ala	Ala	Ser	Gly	Pro	Thr	Leu	Ala	Gly	Gln	Thr	Leu	Lys	Gly	Pro	Trp
145					150				155					160	
Asn	Asn	Leu	Glu	Arg	Leu	Ala	Glu	Asn	Thr	Gly	Glu	Phe	Gln	Glu	Val
			165					170					175		
Val	Arg	Ala	Phe	Tyr	Asp	Thr	Leu	Asp	Ala	Ala	Arg	Ser	Ser	Ile	Arg
			180					185					190		
Val	Val	Arg	Val	Glu	Arg	Val	Ser	His	Pro	Leu	Leu	Gln	Gln	Gln	Tyr
			195				200					205			
Glu	Leu	Tyr	Arg	Glu	Arg	Leu	Leu	Gln	Arg	Cys	Glu	Arg	Arg	Pro	Val

210	215	220
Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro Ala Val Pro Asp Ile		
225	230	235
Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly Arg Asn Ala Thr Val		240
	245	250
Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg Ala Ser Leu Ser Val Gln		255
	260	265
Asp Arg Tyr Ser Pro Pro Asn Ala Asp Gly His Lys Ala Val Phe Val		270
	275	280
Ala Arg Val Leu Thr Gly Asp Tyr Gly Gln Gly Arg Arg Gly Leu Arg		285
	290	295
Ala Pro Pro Leu Arg Gly Pro Gly His Val Leu Leu Arg Tyr Asp Ser		300
305	310	315
Ala Val Asp Cys Ile Cys Gln Pro Ser Ile Phe Val Ile Phe His Asp		320
	325	330
Thr Gln Ala Leu Pro Thr His Leu Ile Thr Cys Glu His Val Pro Arg		335
	340	345
Ala Ser Pro Asp Asp Pro Ser Gly Leu Pro Gly Arg Ser Pro Asp Thr		350
	355	360

<210> 5697

<211> 3362

<212> DNA

<213> Homo sapiens

<400> 5697

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 120
 tgggtcccaa aacctccgtg cctgaggaaa ggagcacgtt ttcctatgtg tgcaaagggtg
 180
 ccatgtgcgc ttgcaggttt gaaatgaggc gagtcttctt caagaagtca ggagaggggg
 240
 agtcttccaa tgaattcatc tttccttccc cccaaccatt cccctcttgg cttttctaga
 300
 atgttcgtgg catcagagag aaagatgaga gctcaccagg tgctcacctt cctcctgctc
 360
 ttcgtgatca cctcgggtggc ctctgaaaac gccagcacat cccgaggctg tgggctggac
 420
 ctccctccctc agtacgtgtc cctgtgcgac ctggacgcca tctggggcat tgtgggtggag
 480
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 540
 ctgcccttca tcaaggagaa ggagaagaag agccctgtgg gcctccactt tctgttctc
 600
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 660
 atctgctctg ttgcgcgtt cctctggggc gtcctctttg cgctctgctt ctccctgctg
 720
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<211> 403

<212> PRT

<213> Homo sapiens

<400> 5698

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Thr	Ser	Arg	Gly	Cys	Gly	Leu	Asp	Leu	Leu	Pro	Gln	Tyr	Val	Ser	Leu
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Phe	Leu	Phe	Leu	Leu	Gly	Thr	Leu	Gly	Leu	Phe	Gly	Leu	Thr	Phe	Ala
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	165	170
Ala Val Glu Trp Leu Val Leu Thr Val Leu Arg Asp Thr Arg Pro Ala		175
	180	185
Cys Ala Tyr Glu Pro Met Asp Phe Val Met Ala Leu Ile Tyr Asp Met		190
	195	200
Val Leu Leu Val Val Thr Leu Gly Leu Ala Leu Phe Thr Leu Cys Gly		205
	210	215
Lys Phe Lys Arg Trp Lys Leu Asn Gly Ala Phe Leu Leu Ile Thr Ala		220
225	230	235
Phe Leu Ser Val Leu Ile Trp Val Ala Trp Met Thr Met Tyr Leu Phe		240
	245	250
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	260	265
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305	310	315
Glu Glu Asp Val Gln Leu Pro Arg Ala Tyr Met Glu Asn Lys Ala Phe		320
	325	330
Ser Met Asp Glu His Asn Ala Ala Leu Arg Thr Ala Gly Phe Pro Asn		335
	340	345
Gly Ser Leu Gly Lys Arg Pro Ser Gly Ser Leu Gly Lys Arg Pro Ser		350
	355	360
Ala Pro Phe Arg Ser Asn Val Tyr Gln Pro Thr Glu Met Ala Val Val		365
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385	390	395
His Leu Trp		400

<210> 5699

<211> 1565

<212> DNA

<213> Homo sapiens

<400> 5699

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360

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<210> 5700

<211> 197

<212> PRT

<213> Homo sapiens

<400> 5700

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			20					25					30		
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<210> 5702

<211> 348

<212> PRT

<213> Homo sapiens

<400> 5702

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			20					25					30		
Leu	Leu	Tyr	Glu	Asp	Ile	Gly	Thr	Ser	Arg	Val	Arg	Tyr	Trp	Asp	Leu
		35				40						45			
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Ala Asp Lys Ile Leu Trp Glu Ile Thr Arg Phe Phe Leu Leu Ala Ile
          115          120          125
Glu Leu Ser Val Ile Ile Leu Gly Leu Ala Phe Gly His Leu Glu Ser
          130          135          140
Lys Ser Ser Ile Lys Arg Val Leu Ala Ile Thr Thr Val Leu Ser Leu
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Ala Tyr Ser Val Thr Gln Gly Thr Leu Glu Ile Leu Tyr Pro Asp Ala
          165          170          175
His Leu Ser Ala Glu Asp Phe Asn Ile Tyr Gly His Gly Gly Arg Gln
          180          185          190
Phe Trp Leu Val Ser Ser Cys Phe Phe Phe Leu Val Tyr Ser Leu Val
          195          200          205
Val Ile Leu Pro Lys Thr Pro Leu Lys Glu Arg Ile Ser Leu Pro Ser
          210          215          220
Arg Arg Ser Phe Tyr Val Tyr Ala Gly Ile Leu Ala Leu Leu Asn Leu
          225          230          235          240
Leu Gln Gly Leu Gly Ser Val Leu Leu Cys Phe Asp Ile Ile Glu Gly
          245          250          255
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          260          265          270
Pro Leu Ile Tyr Val Ala Phe Leu Arg Gly Phe Phe Gly Ser Glu Pro
          275          280          285
Lys Ile Leu Phe Xaa Leu Gln Met Pro Ser Gly Arg Asp Arg Gly Ala
          290          295          300
Arg Cys Thr Pro Thr Pro Ala Leu Arg Cys Gly Pro Ala Gly Gly Pro
          305          310          315          320
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<210> 5703

<211> 1496

<212> DNA

<213> Homo sapiens

<400> 5703

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<210> 5704

<211> 269

<212> PRT

<213> Homo sapiens

<400> 5704

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		20						25					30		
Glu	Gly	Ser	Val	Leu	Arg	Arg	Gly	Phe	Gln	Thr	Cys	Glu	His	Trp	Lys
		35					40					45			
Gln	Ile	Phe	Met	Glu	Ile	Val	Gly	Val	Gln	Ser	Ala	Leu	Cys	Gly	Leu
	50					55					60				
Val	Leu	Ser	Leu	Leu	Ile	Cys	Val	Ala	Ala	Val	Ala	Val	Phe	Thr	Thr

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              100              105              110
Val Glu Ala Ile Ser Leu Ser Ile Leu Val Gly Ser Ser Val Asp Tyr
              115              120              125
Cys Val His Leu Val Glu Gly Tyr Leu Leu Ala Gly Glu Asn Leu Pro
              130              135              140
Pro His Gln Ala Glu Asp Ala Arg Thr Gln Arg Gln Trp Arg Thr Leu
145              150              155              160
Glu Ala Val Arg His Val Gly Val Ala Ile Val Ser Ser Ala Leu Thr
              165              170              175
Thr Val Ile Ala Thr Val Pro Leu Phe Phe Cys Ile Ile Ala Pro Phe
              180              185              190
Ala Lys Phe Gly Lys Ile Val Ala Leu Asn Thr Gly Val Ser Ile Leu
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Tyr Thr Leu Thr Val Ser Thr Ala Leu Leu Gly Ile Met Ala Pro Ser
              210              215              220
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225              230              235              240
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<210> 5705

<211> 768

<212> DNA

<213> Homo sapiens

<400> 5705

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<210> 5706

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<213> Homo sapiens

<400> 5706

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<211> 6988

<212> DNA

<213> Homo sapiens

<400> 5707

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<211> 506

<212> PRT

<213> Homo sapiens

<400> 5708

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Pro	Leu	Leu	Pro	Arg	Asp	Tyr	Leu	Val	Gln	Thr	Val	Glu	Glu	Glu	Ala	165	170	175	
Leu	Ile	Lys	Asn	Asn	Asn	Thr	Cys	Lys	Asp	Phe	Leu	Ile	Glu	Ala	Met	180	185	190	
Lys	Tyr	His	Leu	Leu	Pro	Leu	Asp	Gln	Arg	Leu	Leu	Ile	Lys	Asn	Pro	195	200	205	
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<211> 1805

<212> DNA

<213> Homo sapiens

<400> 5709

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<212> PRT

<213> Homo sapiens

<400> 5710

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Leu	Trp	Leu	Ala	Trp	Trp	Leu	Arg	Glu	Tyr	Ile	Pro	Thr	Asn	Ser	Thr	
			100					105					110			
Cys	Cys	Gly	Arg	Cys	His	Ala	Pro	Met	His	Met	Arg	Gly	Arg	Tyr	Leu	
		115					120					125				
Val	Glu	Val	Asp	Gln	Ala	Ser	Phe	Gln	Cys	Ser	Ala	Pro	Phe	Ile	Met	
	130					135					140					
Asp	Ala	Pro	Arg	Asp	Leu	Asn	Ile	Ser	Glu	Gly	Arg	Met	Ala	Glu	Leu	
145					150				155					160		
Lys	Cys	Arg	Thr	Pro	Pro	Met	Ser	Ser	Val	Lys	Trp	Leu	Leu	Pro	Asn	
				165					170					175		
Gly	Thr	Val	Leu	Ser	His	Ala	Ser	Arg	His	Pro	Arg	Ile	Ser	Val	Leu	
			180					185					190			
Asn	Asp	Gly	Thr	Leu	Asn	Phe	Ser	His	Val	Leu	Leu	Ser	Asp	Thr	Gly	
	195						200					205				
Val	Tyr	Thr	Cys	Met	Val	Thr	Asn	Val	Ala	Gly	Asn	Ser	Asn	Ala	Ser	
	210					215					220					
Ala	Tyr	Leu	Asn	Val	Ser	Thr	Ala	Glu	Leu	Asn	Thr	Ser	Asn	Tyr	Ser	
225					230				235					240		
Phe	Phe	Thr	Thr	Val	Thr	Val	Glu	Thr	Thr	Glu	Ile	Ser	Pro	Glu	Asp	
				245					250					255		
Thr	Thr	Arg	Lys	Tyr	Lys	Pro	Val	Pro	Thr	Thr	Ser	Thr	Gly	Tyr	Gln	
			260					265					270			
Pro	Ala	Tyr	Thr	Thr	Ser	Thr	Thr	Val	Leu	Ile	Gln	Thr	Thr	Arg	Val	
	275						280					285				
Pro	Lys	Gln	Val	Ala	Val	Pro	Ala	Thr	Asp	Thr	Thr	Asp	Lys	Met	Gln	
	290					295					300					
Thr	Ser	Leu	Asp	Glu	Val	Met	Lys	Thr	Thr	Lys	Ile	Ile	Ile	Gly	Cys	
305					310				315					320		
Phe	Val	Ala	Val	Thr	Leu	Leu	Ala	Ala	Ala	Met	Leu	Ile	Val	Phe	Tyr	
				325				330						335		
Lys	Leu	Arg	Lys	Arg	His	Gln	Gln	Arg	Ser	Thr	Val	Thr	Ala	Ala	Arg	
			340					345					350			
Thr	Val	Glu	Ile	Ile	Gln	Val	Asp	Glu	Asp	Ile	Pro	Ala	Ala	Thr	Ser	
	355						360					365				
Ala	Ala	Ala	Thr	Ala	Ala	Pro	Ser	Gly	Val	Ser	Gly	Glu	Gly	Ala	Val	
	370					375					380					
Val	Leu	Pro	Thr	Ile	His	Asp	His	Ile	Asn	Tyr	Asn	Thr	Tyr	Lys	Pro	
385					390				395					400		
Ala	His	Gly	Ala	His	Trp	Thr	Glu	Asn	Ser	Leu	Gly	Asn	Ser	Leu	His	
				405				410						415		
Pro	Thr	Val	Thr	Thr	Ile	Ser	Glu	Pro	Tyr	Ile	Ile	Gln	Thr	His	Thr	
			420				425						430			
Lys	Asp	Lys	Val	Gln	Glu	Thr	Gln	Ile								
			435				440									

<210> 5711

<211> 1142

<212> DNA

<213> Homo sapiens

<400> 5711
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 120
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 180
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 300
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 420
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 540
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 600
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 720
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 900
 cctgcaaccc agttttccag ccaccagtgg gatgatggta tgtgccagca catggtaatt
 960
 ttggtgtaat tctaacttgg gcacaacaaa tgctatttgt cattttttaa ctgaatccga
 1020
 aagaaactcc tattataaat ttaagataat gtaatgtatt tgaaagtgt ttgtataaaa
 1080
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 1140
 1142

<210> 5712
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 5712
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 20 25 30
 Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys Leu
 35 40 45

Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
 50 55 60
 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
 65 70 75 80
 Val Asp Ile Val Asp Ala Lys Leu Lys Ile Pro Val Ser Gly Ser Lys
 85 90 95
 Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe Gln
 100 105 110
 Arg Trp His Leu Asp Glu Val Phe Leu Glu Leu Lys Asp Gly Gln Gln
 115 120 125
 Ile Pro Val Phe Lys Leu Ser Gly Glu Asn Gly Asp Glu Val Lys Lys
 130 135 140
 Glu
 145

<210> 5713

<211> 1996

<212> DNA

<213> Homo sapiens

<400> 5713

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 120
 tacctagaag actatctgga aatgattgag cagcttccta tggatctgcg ggaccgcttc
 180
 acggaaatgc gcgagatgga cctgcaggtg cagaatgcaa tggatcaact agaacaaaga
 240
 gtcagtgaat tctttatgaa tgcaaagaaa aataaacctg agtggagggg agagcaaatg
 300
 gcatccatca aaaaagacta ctataaagct ttggaagatg cagatgagaa ggttcagttg
 360
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 420
 aagtttataaa tggagctgga agctgataat gctggaatta cagaaatatt agagaggcga
 480
 tctttggaat tagacactcc ttcacagcca gtgaacaatc accatgctca ttcacatact
 540
 ccagtggaaa aaaggaaata taatccaact tctcaccata cgacaacaga tcatattcct
 600
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 660
 aatacactag gttgtcgaaa taataattcc acagcctctt ctaacaatgc ctacaatgtg
 720
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 780
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 840
 cgaagaacat caagtttaaa agccagttat gaagcattta agaataatga ctttcagttg
 900
 ggaaaagaat tttcaatggc cagggaacaa gttggctatt catcatcttc ggcacttatg
 960

acaacattaa cacagaatgc cagttcatca gcagccgact cacggagtgg tcgaaagagc
 1020
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 1080
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 1140
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 1200
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 1380
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 1440
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 1500
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 1560
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 1620
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 1680
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 1740
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 1800
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 1920
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 1980
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 1996

<210> 5714

<211> 408

<212> PRT

<213> Homo sapiens

<400> 5714

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 Val Ser Glu Phe Phe Met Asn Ala Lys Lys Asn Lys Pro Glu Trp Arg
 35 40 45
 Glu Glu Gln Met Ala Ser Ile Lys Lys Asp Tyr Tyr Lys Ala Leu Glu
 50 55 60
 Asp Ala Asp Glu Lys Val Gln Leu Ala Asn Gln Ile Tyr Asp Leu Val
 65 70 75 80
 Asp Arg His Leu Arg Lys Leu Asp Gln Glu Leu Ala Lys Phe Lys Met

85 90 95
 Glu Leu Glu Ala Asp Asn Ala Gly Ile Thr Glu Ile Leu Glu Arg Arg
 100 105 110
 Ser Leu Glu Leu Asp Thr Pro Ser Gln Pro Val Asn Asn His His Ala
 115 120 125
 His Ser His Thr Pro Val Glu Lys Arg Lys Tyr Asn Pro Thr Ser His
 130 135 140
 His Thr Thr Thr Asp His Ile Pro Glu Lys Lys Phe Lys Ser Glu Ala
 145 150 155 160
 Leu Leu Ser Thr Leu Thr Ser Asp Ala Ser Lys Glu Asn Thr Leu Gly
 165 170 175
 Cys Arg Asn Asn Asn Ser Thr Ala Ser Ser Asn Asn Ala Tyr Asn Val
 180 185 190
 Asn Ser Ser Gln Pro Leu Gly Ser Tyr Asn Ile Gly Ser Leu Ser Ser
 195 200 205
 Gly Thr Gly Ala Gly Ala Ile Thr Met Ala Ala Ala Gln Ala Val Gln
 210 215 220
 Ala Thr Ala Gln Met Lys Glu Gly Arg Arg Thr Ser Ser Leu Lys Ala
 225 230 235 240
 Ser Tyr Glu Ala Phe Lys Asn Asn Asp Phe Gln Leu Gly Lys Glu Phe
 245 250 255
 Ser Met Ala Arg Glu Thr Val Gly Tyr Ser Ser Ser Ser Ala Leu Met
 260 265 270
 Thr Thr Leu Thr Gln Asn Ala Ser Ser Ser Ala Ala Asp Ser Arg Ser
 275 280 285
 Gly Arg Lys Ser Lys Asn Asn Asn Lys Ser Ser Ser Gln Gln Ser Ser
 290 295 300
 Ser Ser Ser Ser Ser Ser Ser Leu Ser Ser Cys Ser Ser Ser Ser Thr
 305 310 315 320
 Val Val Gln Glu Ile Ser Gln Gln Thr Thr Val Val Pro Glu Ser Asp
 325 330 335
 Ser Asn Ser Gln Val Asp Trp Thr Tyr Asp Pro Asn Glu Pro Arg Tyr
 340 345 350
 Cys Ile Cys Asn Gln Val Ser Tyr Gly Glu Met Val Gly Cys Asp Asn
 355 360 365
 Gln Asp Cys Pro Ile Glu Trp Phe His Tyr Gly Cys Val Gly Leu Thr
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 Glu Ala Pro Lys Gly Lys Trp Tyr Cys Pro Gln Cys Thr Ala Ala Met
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 Lys Arg Arg Gly Ser Arg His Lys
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<210> 5715

<211> 1458

<212> DNA

<213> Homo sapiens

<400> 5715

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 120
 ggggcttggc cgtctagtgt gatgaaggag gcgaccccca aggtgggaag gcgcacgggt
 180

tgggggtttga ggggtggatga ttgggtgacgg aggggtgtatc ttcaggagga ggttcgagtg
 240
 aagatcaaag acttgaatga acacattgtt tgctgcctat gcgccggcta ctctgtggat
 300
 gccaccacca tcacagagtg tcttcatact ttctgcaaga gttgtattgt gaagtacctc
 360
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 420
 aacctcaaac tggaccgggt catgcaggac atcgtgtata agctgggtgcc tggcttgcaa
 480
 gacagtgaag agaaacggat tcgggaattc taccagtccc gaggtttgga ccgggtcacc
 540
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 600
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 660
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 720
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 780
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 840
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 900
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 960
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 1020
 cggagggtcc tgtgtcaccg cttgatgcta aacctcagc atgtgcagct cctttttgac
 1080
 aatgaagttc tccctgatca catgacaatg aagcagatat gcctctcccg ctgggtcggc
 1140
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 1200
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 1260
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 1320
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 1440
 aaaaaaaaaa aaaaaaaaa
 1458

<210> 5716

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5716

Leu Gln Glu Glu Val Arg Val Lys Ile Lys Asp Leu Asn Glu His Ile
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 Val Cys Cys Leu Cys Ala Gly Tyr Phe Val Asp Ala Thr Thr Ile Thr

ctgatctcca tcctgggtgg cctctgcctc tgctccgct gctgctgagg ctctgacgag
 960
 gacccagccg ccagcgcccg gcggccctac caggctcccc tgtccgtgat gcccgctgcc
 1020
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 1080
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 1140
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 1200
 ccggccacgg ccccggtgtct tgcaactctca tggcccctcc aggccaagaa ctgctcttgg
 1260
 gaagtgcgat atctcccctc tgaggctgga tccctcatct tctgaccctg ggttctgggc
 1320
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 1380
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 1419

<210> 5718

<211> 228

<212> PRT

<213> Homo sapiens

<400> 5718

Met	Ser	Met	Ala	Val	Glu	Thr	Phe	Gly	Phe	Phe	Met	Ala	Thr	Val	Gly
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Leu	Leu	Met	Leu	Gly	Val	Thr	Leu	Pro	Asn	Ser	Tyr	Trp	Arg	Val	Ser
			20					25				30			
Thr	Val	His	Gly	Asn	Val	Ile	Thr	Thr	Asn	Thr	Ile	Phe	Glu	Asn	Leu
		35					40					45			
Trp	Phe	Ser	Cys	Ala	Thr	Asp	Ser	Leu	Gly	Val	Tyr	Asn	Cys	Trp	Glu
		50				55					60				
Phe	Pro	Ser	Met	Leu	Ala	Leu	Ser	Gly	Tyr	Ile	Gln	Ala	Cys	Arg	Ala
65				70					75					80	
Leu	Met	Ile	Thr	Ala	Ile	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Leu	Leu	Gly
			85					90					95		
Ile	Ala	Gly	Leu	Arg	Cys	Thr	Asn	Ile	Gly	Gly	Leu	Glu	Leu	Ser	Arg
			100					105					110		
Lys	Ala	Lys	Leu	Ala	Ala	Thr	Ala	Gly	Ala	Leu	His	Ile	Leu	Ala	Gly
		115					120					125			
Ile	Cys	Gly	Met	Val	Ala	Ile	Ser	Trp	Tyr	Ala	Phe	Asn	Ile	Thr	Arg
		130					135				140				
Asp	Phe	Phe	Asp	Pro	Leu	Tyr	Pro	Gly	Thr	Lys	Tyr	Glu	Leu	Gly	Pro
145				150						155				160	
Ala	Leu	Tyr	Leu	Gly	Trp	Ser	Ala	Ser	Leu	Ile	Ser	Ile	Leu	Gly	Gly
			165					170					175		
Leu	Cys	Leu	Cys	Ser	Ala	Cys	Cys	Cys	Gly	Ser	Asp	Glu	Asp	Pro	Ala
			180					185				190			
Ala	Ser	Ala	Arg	Arg	Pro	Tyr	Gln	Ala	Pro	Val	Ser	Val	Met	Pro	Val
		195					200					205			
Ala	Thr	Ser	Asp	Gln	Glu	Gly	Asp	Ser	Ser	Phe	Gly	Lys	Tyr	Gly	Arg
		210				215					220				
Asn	Ala	Tyr	Val												

225

<210> 5719

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5719

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120
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180
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240
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300
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360
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420
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480
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540
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600
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660
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720
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780
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960
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1020
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1080
cacgttaaga agcccgaagg gcttttcaga aatcggtttg aagttagaaa tgcggtaaaa
1140
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1200
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1260
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1380

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 1620
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 2160
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 2267

<210> 5720

<211> 455

<212> PRT

<213> Homo sapiens

<400> 5720

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Gln	Gln	Gln	Arg	Gly	His	Gly	Ala	Val	His	Ala	Ala	Gly	Gln	Gly	Ala
			20					25					30		
His	Asp	Val	Pro	Gln	Gly	Leu	His	Pro	Pro	Val	Ala	Pro	Ser	Gly	Gly
	35					40					45				
Val	Asp	Ser	Ala	Val	Ala	Ala	Leu	Leu	Leu	Arg	Arg	Arg	Gly	Tyr	Gln
	50				55					60					
Val	Thr	Gly	Val	Phe	Met	Lys	Asn	Trp	Asp	Ser	Leu	Asp	Glu	His	Gly
65					70				75					80	
Val	Cys	Thr	Ala	Asp	Lys	Asp	Cys	Glu	Asp	Ala	Tyr	Arg	Val	Cys	Gln
			85					90						95	
Ile	Leu	Asp	Ile	Pro	Phe	His	Gln	Val	Ser	Tyr	Val	Lys	Glu	Tyr	Trp
	100							105				110			
Asn	Asp	Val	Phe	Ser	Asp	Phe	Leu	Asn	Glu	Tyr	Glu	Lys	Gly	Arg	Thr
	115					120					125				
Pro	Asn	Pro	Asp	Ile	Val	Cys	Asn	Lys	His	Ile	Lys	Phe	Ser	Cys	Phe

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      130              135              140
Phe His Tyr Ala Val Asp Asn Leu Gly Ala Asp Ala Ile Ala Thr Gly
145              150              155              160
His Tyr Ala Arg Thr Ser Leu Glu Asp Glu Glu Val Phe Glu Gln Lys
      165              170              175
His Val Lys Lys Pro Glu Gly Leu Phe Arg Asn Arg Phe Glu Val Arg
      180              185              190
Asn Ala Val Lys Leu Leu Gln Ala Ala Asp Ser Phe Lys Asp Gln Thr
      195              200              205
Phe Phe Leu Ser Gln Val Ser Gln Asp Ala Leu Arg Arg Thr Ile Phe
      210              215              220
Pro Leu Gly Gly Leu Thr Lys Glu Phe Val Lys Lys Ile Ala Ala Glu
225              230              235              240
Asn Arg Leu His His Val Leu Gln Lys Lys Glu Ser Met Gly Met Cys
      245              250              255
Phe Ile Gly Lys Arg Asn Phe Glu His Phe Leu Leu Gln Tyr Leu Gln
      260              265              270
Pro Arg Pro Gly His Phe Ile Ser Ile Glu Asp Asn Lys Val Leu Gly
      275              280              285
Thr His Lys Gly Trp Phe Leu Tyr Thr Leu Gly Gln Arg Ala Asn Ile
      290              295              300
Gly Gly Leu Arg Glu Pro Trp Tyr Val Val Glu Lys Asp Ser Val Lys
305              310              315              320
Gly Asp Val Phe Val Ala Pro Arg Thr Asp His Pro Ala Leu Tyr Arg
      325              330              335
Asp Leu Leu Arg Thr Ser Arg Val His Trp Ile Ala Glu Glu Pro Pro
      340              345              350
Ala Ala Leu Val Arg Asp Lys Met Met Glu Cys His Phe Arg Phe Arg
      355              360              365
His Gln Met Ala Leu Val Pro Cys Val Leu Thr Leu Asn Gln Asp Gly
      370              375              380
Thr Val Trp Val Thr Ala Val Gln Ala Val Arg Ala Leu Ala Thr Gly
385              390              395              400
Gln Phe Ala Val Phe Tyr Lys Gly Asp Glu Cys Leu Gly Ser Gly Lys
      405              410              415
Ile Leu Arg Leu Gly Pro Ser Ala Tyr Thr Leu Gln Lys Gly Gln Arg
      420              425              430
Arg Ala Gly Met Ala Thr Glu Ser Pro Ser Asp Ser Pro Glu Asp Gly
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Pro Gly Leu Ser Pro Leu Leu
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<210> 5721

<211> 400

<212> DNA

<213> Homo sapiens

<400> 5721

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120
ggaatagcct tgccatgtct gttggacgct gacaaatatt tctggtgggc gcttttgtac
180

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ttggtgaaca ccagctttaa ggaagatggc ccagactata cagaacacct gccatgccct
 240
 tgagactgca gactttcatc tacaacagtg gttaatgtaa aagagtagtt atggtgtaaa
 300
 ctggtgaatt tcttcttccc ttgtatttc taattgacct ttcctccctg taaagaaaag
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<210> 5722
 <211> 80
 <212> PRT
 <213> Homo sapiens

<400> 5722
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 20 25 30
 Ala Phe Leu Lys Arg Lys Glu Tyr Gly Ile Ala Leu Pro Cys Leu Leu
 35 40 45
 Asp Ala Asp Lys Tyr Phe Trp Trp Ala Leu Leu Tyr Leu Val Asn Thr
 50 55 60
 Ser Phe Lys Glu Asp Gly Pro Asp Tyr Thr Glu His Leu Pro Cys Pro
 65 70 75 80

<210> 5723
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 5723
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 120
 ctgctttcta aagagtgggt gcacgcccga ctcagcggag ccatgtggca tggatgggtg
 180
 gcttccattt gcagcggatg tctgctctca gatgaaggca caggctgccc ctgctgccc
 240
 cagcatgccc cctgccctgc atgccccctg cctgcatgt cacctgtcct acacatcccc
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 360
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 376

<210> 5724
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 5724
 Xaa Thr Thr Phe Ser Ser Phe His Pro Pro Gln Pro Lys Leu Ser Ala

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20	25	30	
Met Gly Val Pro Glu Val Trp Gly Leu Leu Ser Lys Glu Trp Trp His			
35	40	45	
Ala Gly Leu Ser Gly Ala Met Trp His Gly Trp Trp Ala Ser Ile Cys			
50	55	60	
Ser Gly Cys Leu Leu Ser Asp Glu Gly Thr Gly Cys Pro Cys Leu Pro			
65	70	75	80
Gln His Ala Pro Cys Pro Ala Cys Pro Leu Pro Cys Met Ser Pro Val			
85	90	95	
Leu His Ile Pro Cys Pro Ala Gly Pro Ile Leu Ser Cys Met Ser Pro			
100	105	110	
Val Leu His Met Pro Cys Pro Ala Leu Leu Leu His Ala			
115	120	125	

<210> 5725

<211> 1160

<212> DNA

<213> Homo sapiens

<400> 5725

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120
accgcgcacg ggcgagcatg gggggcaagc agagcacggc gaccgcgtcc cgggggcccc
180
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240
gggcactacc ggacgggagg cggggccatg gggctgcgca gcgcatcggt cagctcgggtg
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480
atgctgtacc tgggctccc agcctcgctg gcggatgctc tacctctgca catcgcaccc
540
agggtggtta gctcgcatag tggtttcaag tgccccattt gctccaagtc tgtggcttct
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gacgagatgg aaatgcactt tataatgtgt ttgagcaaac ctgcctctc ctacaacgat
660
gatgtgctga ctaaagacgc gggtagtgt gtgatctgcc tggaggagct gctgcagggg
720
gacacgatag ccaggctgcc ctgcctgtgc atctatcaca aaagctgcat agactcgtgg
780
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840
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960

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 aatgaatcaa ctgctatcct tcccctcacc cctcagccca ggagggaaaag ggcattttct
 1080
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 aaaaaaagtc tagtgtcgac
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<210> 5726

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5726

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Leu	Tyr	Ala	Arg	Pro	Ala	Leu	Pro	Leu	Leu	Leu	Arg	Ser	Gly	Gly	Gly
			20					25					30		
Ser	Arg	Pro	Pro	Gly	Ser	Arg	Pro	Thr	Ala	His	Gly	Arg	Ala	Trp	Gly
		35					40					45			
Ala	Ser	Arg	Ala	Arg	Arg	Pro	Ala	Pro	Gly	Gly	Pro	Phe	Pro	Gly	Val
	50					55					60				
Ser	Thr	Asp	Asp	Ser	Ala	Val	Pro	Pro	Pro	Gly	Gly	Ala	Pro	His	Phe
65					70					75				80	
Gly	His	Tyr	Arg	Thr	Gly	Gly	Gly	Ala	Met	Gly	Leu	Arg	Ser	Ala	Ser
			85						90					95	
Val	Ser	Ser	Val	Ala	Gly	Met	Gly	Met	Asp	Pro	Ser	Thr	Ala	Gly	Gly
			100					105					110		
Val	Pro	Phe	Gly	Leu	Tyr	Thr	Pro	Ala	Ser	Arg	Gly	Thr	Gly	Asp	Ser
		115					120					125			
Glu	Arg	Ala	Pro	Gly	Gly	Gly	Gly	Ser	Ala	Ser	Asp	Ser	Thr	Tyr	Ala
	130					135					140				
His	Gly	Asn	Gly	Tyr	Gln	Glu	Thr	Gly	Gly	Gly	His	His	Arg	Asp	Gly
145					150					155				160	
Met	Leu	Tyr	Leu	Gly	Ser	Arg	Ala	Ser	Leu	Ala	Asp	Ala	Leu	Pro	Leu
			165						170					175	
His	Ile	Ala	Pro	Arg	Trp	Phe	Ser	Ser	His	Ser	Gly	Phe	Lys	Cys	Pro
			180					185					190		
Ile	Cys	Ser	Lys	Ser	Val	Ala	Ser	Asp	Glu	Met	Glu	Met	His	Phe	Ile
		195					200					205			
Met	Cys	Leu	Ser	Lys	Pro	Arg	Leu	Ser	Tyr	Asn	Asp	Asp	Val	Leu	Thr
	210					215					220				
Lys	Asp	Ala	Gly	Glu	Cys	Val	Ile	Cys	Leu	Glu	Glu	Leu	Leu	Gln	Gly
225					230					235				240	
Asp	Thr	Ile	Ala	Arg	Leu	Pro	Cys	Leu	Cys	Ile	Tyr	His	Lys	Ser	Cys
			245						250					255	
Ile	Asp	Ser	Trp	Phe	Glu	Val	Asn	Arg	Ser	Cys	Pro	Glu	His	Pro	Ala
		260						265					270		

Asp

<210> 5727

<211> 1237

<212> DNA

<213> Homo sapiens

<400> 5727

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120
gagatcctaa ggaccttgag ccccaggag ctagagcagc tggactgcga actacaggag
180
atggatcctg agaacatgct cctgccagct ggactaagac aacgtgacca gacaaagaag
240
agcccaacgg ggccactgga ccgagaggcc cttttgcagt acttgagca acaggcacta
300
gaagtcaaag agcgtgatga cttggtgccc ttcacaggcg agaagaagg gaaaccctat
360
attcagccca agagggaaat cccagcagag gagcagatca ccctggagcc tgagctggag
420
gaggcactgg cacatgccac agatgctgaa atgtgtgaca ttgcagcaat tctggacatg
480
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540
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600
ccaaatccca caaacattga ggagatacta aagaggggtcc gaagcaatga caaggagctg
660
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720
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780
gacccattg ccaatgcagt ggctgacatg ttgcgtgaga atcgtagcct ccagagccta
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960
gtggagatgg agatggccac cgtgctagag cagtgtccct ctattgtccg ctttggctac
1020
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1080
ctacgtcgcc agcaaaagaa gagataacac tgcatttccc ttaccaact agcgtctggga
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1237

<210> 5728

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5728

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			20					25				30	
Lys	Tyr	Arg	Asp	Ile	Asp	Glu	Asp	Glu	Ile	Leu	Arg	Thr	Leu
		35					40				45		Pro
Glu	Glu	Leu	Glu	Gln	Leu	Asp	Cys	Glu	Leu	Gln	Glu	Met	Asp
	50					55					60		Glu
Asn	Met	Leu	Leu	Pro	Ala	Gly	Leu	Arg	Gln	Arg	Asp	Gln	Thr
65					70				75				Lys
Ser	Pro	Thr	Gly	Pro	Leu	Asp	Arg	Glu	Ala	Leu	Leu	Gln	Tyr
			85					90				95	Leu
Gln	Gln	Ala	Leu	Glu	Val	Lys	Glu	Arg	Asp	Asp	Leu	Val	Pro
		100						105				110	Phe
Gly	Glu	Lys	Lys	Gly	Lys	Pro	Tyr	Ile	Gln	Pro	Lys	Arg	Glu
		115					120				125		Ile
Ala	Glu	Glu	Gln	Ile	Thr	Leu	Glu	Pro	Glu	Leu	Glu	Ala	Leu
	130					135				140			Ala
His	Ala	Thr	Asp	Ala	Glu	Met	Cys	Asp	Ile	Ala	Ala	Ile	Leu
145				150					155				Asp
Tyr	Thr	Leu	Met	Ser	Asn	Lys	Gln	Tyr	Tyr	Asp	Ala	Leu	Cys
			165					170				175	Ser
Glu	Ile	Cys	Asn	Thr	Glu	Gly	Ile	Ser	Ser	Val	Val	Gln	Pro
		180						185				190	Asp
Tyr	Lys	Pro	Val	Pro	Asp	Glu	Pro	Pro	Asn	Pro	Thr	Asn	Ile
	195					200				205			Glu
Ile	Leu	Lys	Arg	Val	Arg	Ser	Asn	Asp	Lys	Glu	Leu	Glu	Val
	210					215				220			Asn
Leu	Asn	Asn	Ile	Gln	Asp	Ile	Pro	Ile	Pro	Met	Leu	Ser	Glu
225				230					235				Leu
Glu	Ala	Met	Lys	Ala	Asn	Thr	Tyr	Val	Arg	Ser	Phe	Ser	Leu
		245						250				255	Val
Thr	Arg	Ser	Gly	Asp	Pro	Ile	Ala	Asn	Ala	Val	Ala	Asp	Met
		260						265				270	Leu
Glu	Asn	Arg	Ser	Leu	Gln	Ser	Leu	Asn	Ile	Glu	Ser	Asn	Phe
	275					280				285			Ile
Ser	Thr	Gly	Leu	Met	Ala	Val	Leu	Lys	Ala	Val	Arg	Glu	Asn
	290					295				300			Ala
Leu	Thr	Glu	Leu	Arg	Val	Asp	Asn	Gln	Arg	Gln	Trp	Pro	Gly
305				310					315				Asp
Val	Glu	Met	Glu	Met	Ala	Thr	Val	Leu	Glu	Gln	Cys	Pro	Ser
		325						330				335	Ile
Arg	Phe	Gly	Tyr	His	Phe	Thr	Gln	Gln	Gly	Pro	Arg	Ala	Arg
		340					345				350		Ala
Gln	Ala	Met	Thr	Arg	Asn	Asn	Glu	Leu	Arg	Arg	Gln	Gln	Lys
	355						360				365		Arg

<210> 5729

<211> 381

<212> DNA

<213> Homo sapiens

<400> 5729

naaattttatt actacggatc acagcagcaa cgggcgggaa gggcgggccc agactcattt
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 120
 cagccagatg cgcctcaggt ctttctcgaa cttgatctgc aagacgcaga gagagggacc
 180
 gccaaagtaat tcgtggcaaa gaaacgtggt ctcagcactt tgccctccca gggccaagca
 240
 gggggccact cacctgcttg cgtctcaggg gtcctctctg gaccttcctc cgcaggaacc
 300
 gcgtcttctt caccagcttc cggctacttg ggtgggtcat cttccgccgg cggatcttca
 360
 gcacgttttt gcactaaatt t
 381

<210> 5730

<211> 64

<212> PRT

<213> Homo sapiens

<400> 5730

Phe	Val	Ala	Lys	Lys	Arg	Val	Leu	Ser	Thr	Leu	Pro	Ser	Gln	Gly	Gln
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Ala	Gly	Gly	His	Ser	Pro	Ala	Cys	Val	Ser	Gly	Val	Pro	Pro	Gly	Pro
			20				25						30		
Ser	Ser	Ala	Gly	Thr	Ala	Ser	Ser	Pro	Ala	Ser	Gly	Thr	Cys	Gly	
	35					40					45				
Gly	Ser	Ser	Ser	Ala	Gly	Gly	Ser	Ser	Ala	Arg	Phe	Cys	Thr	Lys	Phe
	50					55					60				

<210> 5731

<211> 891

<212> DNA

<213> Homo sapiens

<400> 5731

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 120
 attttgtcag cacttgggaa cttcctggcc cagatgattg agaagaagcg gaaaaaagaa
 180
 aactctagaa gtctggatgt cgggtggcct ctgagatatg ccgtttacgg gttcttcttc
 240
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 360
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 420
 aagatgaggg ggggcttctg gccggcgctg aggatgaact ggcggtgtg gacgccacta
 480
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 540
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 600

cagggtgcact gtggacgtgg gtctgggggt ctcacccgcc cagcgagagc agaaccaatc
 660
 cagtcaggat gtcactgact ctaaatacagg tgattcaaga tgcccaaaaa tgatggatag
 720
 agaaacagaa atctctgaat gtcagaaccc tgtcttttaa aaaggcagtc actgccttca
 780
 ggtggtgctg cccagaaaac ttaaaattta gtcgaggcag tttcaattgt tactgtggac
 840
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 891

<210> 5732
 <211> 193
 <212> PRT
 <213> Homo sapiens

<400> 5732
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 35 40 45
 Leu Ala Gln Met Ile Glu Lys Lys Arg Lys Lys Glu Asn Ser Arg Ser
 50 55 60
 Leu Asp Val Gly Gly Pro Leu Arg Tyr Ala Val Tyr Gly Phe Phe Phe
 65 70 75 80
 Thr Gly Pro Leu Ser His Phe Phe Tyr Phe Phe Met Glu His Trp Ile
 85 90 95
 Pro Pro Glu Val Pro Leu Ala Gly Leu Arg Arg Leu Leu Leu Asp Arg
 100 105 110
 Leu Val Phe Ala Pro Ala Phe Leu Met Leu Phe Phe Leu Ile Met Asn
 115 120 125
 Phe Leu Glu Gly Lys Asp Ala Ser Ala Phe Ala Ala Lys Met Arg Gly
 130 135 140
 Gly Phe Trp Pro Ala Leu Arg Met Asn Trp Arg Val Trp Thr Pro Leu
 145 150 155 160
 Gln Phe Ile Asn Ile Asn Tyr Val Pro Leu Lys Phe Arg Val Leu Phe
 165 170 175
 Ala Asn Leu Ala Ala Leu Phe Trp Tyr Ala Tyr Leu Ala Ser Leu Gly
 180 185 190
 Lys

<210> 5733
 <211> 950
 <212> DNA
 <213> Homo sapiens

<400> 5733
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 120

gtcagctata ctttctctct ctggctgccc ctgtacatca cgaatgtgga tcaccttgat
 180
 gccaaaaagg cgggggtgcac aggtagcccc gacctctca ggcattccag ccacagaaca
 240
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 300
 aaaacaggac accagagccc accagacagt gccggccagc agagaagcag agagccagcg
 360
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 420
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 480
 tgtcgagaag ccaaggggtga ggaggcagga agcacctccg gttggaggca cccaggcttg
 540
 ccagccacag agcgccccga agtcaccgtc atcccagccc ctggccttcc tgccgcoctc
 600
 cggggccatg gcgctgctgt tcagctcagg cacaggggca cagcagaggt ttgggaagcg
 660
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 720
 cacacaccac acctgggact gtttttaata catagcaaca gactgggtta tttatttaag
 780
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 840
 caaactccaa ttgttctctg gctgtttttt tcagttgtgt ctagcaaaat acttatctgc
 900
 cctttgaaat aaaatgtttt tgttttaaaa atctcaaaaa aaaaaaaaaa
 950

<210> 5734

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5734

Xaa	His	Val	Val	Ile	Leu	Pro	Gly	Asp	Gly	Gly	Ser	Gly	Thr	Ala	Ala
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Ile	Ser	Phe	Thr	Gly	Ala	Leu	Lys	Ile	Pro	Gly	Val	Ile	Glu	Phe	Ser
		20					25				30				
Leu	Cys	Leu	Leu	Phe	Ala	Lys	Leu	Val	Ser	Tyr	Thr	Phe	Leu	Phe	Trp
		35					40				45				
Leu	Pro	Leu	Tyr	Ile	Thr	Asn	Val	Asp	His	Leu	Asp	Ala	Lys	Lys	Ala
		50				55				60					
Gly	Cys	Thr	Gly	Ser	Pro	Asp	Pro	Leu	Arg	His	Ser	Ser	His	Arg	Thr
65					70				75					80	
Ser	Lys														

<210> 5735

<211> 4241

<212> DNA

<213> Homo sapiens

<400> 5735

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120
ccccttctcg ggagtgcgcc aatgcctggg ccgacccaaa ccctgtcccc aaatggcgag
180
aacaacaacg acatcatcca ggataataac gggaccatca ttcctttccg gaagcacaca
240
gtgcgcgggg agcgttccta cagttgggga atggcgggtca atgtgtattc tacctcgata
300
accaagaga ctatgagcag acatgacatc attgcatggg ttaatgacat agtatcttta
360
aactacacaa aagtggaaca gctttgttca ggagcggcct attgccaatt catggacatg
420
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<210> 5736

<211> 327

<212> PRT

<213> Homo sapiens

<400> 5736

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			20					25					30		
Thr	Val	Arg	Gly	Glu	Arg	Ser	Tyr	Ser	Trp	Gly	Met	Ala	Val	Asn	Val
		35					40					45			
Tyr	Ser	Thr	Ser	Ile	Thr	Gln	Glu	Thr	Met	Ser	Arg	His	Asp	Ile	Ile
	50					55					60				
Ala	Trp	Val	Asn	Asp	Ile	Val	Ser	Leu	Asn	Tyr	Thr	Lys	Val	Glu	Gln
65					70					75				80	
Leu	Cys	Ser	Gly	Ala	Ala	Tyr	Cys	Gln	Phe	Met	Asp	Met	Leu	Phe	Pro
				85					90					95	
Gly	Cys	Ile	Ser	Leu	Lys	Lys	Val	Lys	Phe	Gln	Ala	Lys	Leu	Glu	His

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      100      105      110
Glu Tyr Ile His Asn Phe Lys Leu Leu Gln Ala Ser Phe Lys Arg Met
      115      120      125
Asn Val Asp Lys Val Ile Pro Val Glu Lys Leu Val Lys Gly Arg Phe
      130      135      140
Gln Asp Asn Leu Asp Phe Ile Gln Trp Phe Lys Lys Phe Tyr Asp Ala
145      150      155      160
Asn Tyr Asp Gly Lys Glu Tyr Asp Pro Val Glu Ala Arg Gln Gly Gln
      165      170      175
Asp Ala Ile Pro Pro Pro Asp Pro Gly Glu Gln Ile Phe Asn Leu Pro
      180      185      190
Lys Lys Ser His His Ala Asn Ser Pro Thr Ala Gly Ala Ala Lys Ser
      195      200      205
Ser Pro Ala Ala Lys Pro Gly Ser Thr Pro Ser Arg Pro Ser Ser Ala
      210      215      220
Lys Arg Ala Ser Ser Ser Gly Ser Ala Ser Lys Ser Asp Lys Asp Leu
225      230      235      240
Glu Thr Gln Val Ile Gln Leu Asn Glu Gln Val His Ser Leu Lys Leu
      245      250      255
Ala Leu Glu Gly Val Glu Lys Glu Arg Asp Phe Tyr Phe Gly Lys Leu
      260      265      270
Arg Glu Ile Glu Leu Leu Cys Gln Glu His Gly Gln Glu Asn Asp Asp
      275      280      285
Leu Val Gln Arg Leu Met Asp Ile Leu Tyr Ala Ser Glu Glu His Glu
      290      295      300
Gly His Thr Glu Glu Pro Glu Ala Glu Glu Gln Ala His Glu Gln Gln
305      310      315      320
Pro Pro Gln Gln Glu Glu Tyr
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<210> 5737

<211> 340

<212> DNA

<213> Homo sapiens

<400> 5737

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120
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240
aagatgttgc agtgccatcc tcacctggtg gcttgaaatc ggccaaggtg ggagcattta
300
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340

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<210> 5738

<211> 99

<212> PRT

<213> Homo sapiens

<400> 5738

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Met Leu Pro Pro Trp Pro Ile Ser Ser His Gln Val Arg Met Ala Leu
 1           5           10           15
Gln His Leu Pro Leu Arg Leu Gln Leu Pro Ser Gln Val His Gln Glu
      20           25           30
Thr Thr Gly His His Trp Gln Trp Arg Gly Asp Met Glu His Gly Leu
      35           40           45
Gly Ser Arg Leu Leu Ala Pro Asp Val Gln Pro Gln Thr Pro Pro Val
      50           55           60
Met Gly Glu Val Trp Arg Pro Val Gln Leu Ser Gln Gly His Ala His
65           70           75           80
Leu Ser Leu Gly Ser Val Gly Lys Ala Tyr Pro Lys Ser His Ile Gln
      85           90           95
Gly Gly Xaa

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<210> 5739

<211> 780

<212> DNA

<213> Homo sapiens

<400> 5739

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120
ttactcgta attggaacaa cctctagcct gtactaaatt tccatattta tttggcccg
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420
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660
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<210> 5740

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5740

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Ser Lys Pro Cys Gln Ala Leu Gln Leu Ser Thr Leu Pro Ser Gly
 20           25           30
Leu Pro Val Cys Gly Gly Gln Lys Arg Lys Thr Thr Gln Gly Glu Cys
 35           40           45
Leu Leu Pro Pro Ala Gly Lys Gln Leu Gly His His Leu Ser Glu Ser
 50           55           60
Arg Cys Cys Ser Ser Trp Gln Gln Ser His Ser Glu Arg Ser Cys Val
 65           70           75           80
His Cys Leu Ser Gly Arg Pro Cys Gln Ser Pro Ser Leu Pro Pro Pro
 85           90           95
Tyr Leu Cys Arg Lys Pro Gly His His His Phe Lys Ala Leu Pro Ser
 100          105          110
Phe Leu Gly Arg Ala Gln Pro Gln
 115          120

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<210> 5741

<211> 2444

<212> DNA

<213> Homo sapiens

<400> 5741

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 120
gagtatgagg cggctgcagc acgcatcgag gctatggacc ctgccactgt cgagcagcag
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 780
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 840
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<210> 5742

<211> 427
 <212> PRT
 <213> Homo sapiens

<400> 5742

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 20           25           30
Gly Ala Gly Tyr Asn Ser Glu Asp Glu Tyr Glu Ala Ala Ala Ala Arg
 35           40           45
Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp Phe
 50           55           60
Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Ile Lys Gln Met Lys
 65           70           75           80
Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr Gly
 85           90           95
Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr Leu
100           105           110
Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe Thr
115           120           125
Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His Ile
130           135           140
Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr
145           150           155           160
Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln Asn
165           170           175
Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn
180           185           190
Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Leu
195           200           205
Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn Ala
210           215           220
Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp
225           230           235           240
Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu Glu
245           250           255
Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu Lys
260           265           270
Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser Ala
275           280           285
Thr Cys Ser Ser Ala Thr Ala Ala Ala Ser Ser Gly Leu Glu Glu Trp
290           295           300
Thr Ser Arg Ser Pro Arg Gln Arg Ser Ser Ala Ser Ser Pro Glu His
305           310           315           320
Pro Glu Leu His Ala Glu Leu Gly Met Lys Pro Pro Ser Pro Gly Thr
325           330           335
Val Leu Ala Leu Ala Lys Pro Pro Ser Pro Cys Ala Pro Gly Thr Ser
340           345           350
Ser Gln Phe Ser Ala Gly Ala Asp Arg Ala Thr Ser Pro Leu Val Ser
355           360           365
Leu Tyr Pro Ala Leu Glu Cys Arg Ala Leu Ile Gln Gln Met Ser Pro
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Ser Ala Phe Gly Leu Asn Asp Trp Asp Asp Asp Glu Ile Leu Ala Ser

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<212> DNA

<213> Homo sapiens

<400> 5745

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120
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720
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<210> 5746

<211> 140

<212> PRT

<213> Homo sapiens

<400> 5746

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Ala Gly Gly Pro Leu Cys Val Phe Val Gln Phe Cys Cys Met Gly Phe
20     25     30
Val Thr Gln Lys Leu Met Leu Arg Lys Ala Ser Leu Gly Pro Leu Pro
35     40     45
Arg Ala Ser Glu Arg Pro Gly Val Pro Val Phe Leu Glu Met Gly Pro
50     55     60
Ser Ala Ala Gly Cys Glu Ala Leu Arg Ser Ile Thr Gly Arg Ala Trp
65     70     75     80
Arg Trp Trp Pro Pro Gly Thr Thr Leu Ser Cys Leu Phe Thr Phe His
85     90     95
Tyr Gln Val Phe Ser Gly His Tyr Asp Leu Phe Pro Tyr Asn Ser Asp

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	100		105		110
Leu Cys Ile	Leu Leu Trp	Pro Ala Val	Ser Ala Gly	Gly Ser Gln	Arg
	115		120		125
Gly Thr Gly	Arg Ala Ser	Pro Cys Arg	Thr Ala Glu		
	130		135		140

<210> 5747
 <211> 1999
 <212> DNA
 <213> Homo sapiens

<400> 5747
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<211> 492

<212> PRT

<213> Homo sapiens

<400> 5748

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<211> 2849

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5750

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Pro	Met	Phe	Leu	Ala	Leu	Asp	Arg	Arg	Gly	Gly	Pro	Arg	Pro	Gly	Gly		
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<212> DNA

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<210> 5754

<211> 221

<212> PRT

<213> Homo sapiens

<400> 5754

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Phe Pro Asn His Thr Asp Asn Leu Asn Ser Ser Gln Arg Leu Ser Pro
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Ser Ser Arg Met Arg Lys Leu Pro Gln Gly Arg Pro Val Pro Pro Leu
      50           55           60
Gly Pro Glu Thr Arg Val Ser Val Val Trp Val Glu Arg Tyr Asp Asp
      65           70           75           80
Ile Glu Asn Phe Pro Leu Ser Glu Leu Met Thr Glu Ile Ser Thr Gly
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Val Glu Thr Thr Ala Asn Ser Ser Thr Ser Leu Arg Ser Thr Thr Leu
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Glu Lys Glu Val Pro Val Ile Phe Ile His Pro Leu Asn Thr Gly Leu
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Pro Leu Val Asp Gly Met Ile Val Ser Arg Arg Ala Leu Gly Phe Leu
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Val Arg Gln Thr Val Ile Asn Ile Cys Arg Arg Lys Arg Leu Glu Ser
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<211> 1513

<212> DNA

<213> Homo sapiens

<400> 5755

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<210> 5756

<211> 415

<212> PRT

<213> Homo sapiens

<400> 5756

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			20					25					30		
Ala	Ala	Leu	Leu	Ala	Gln	Asp	Tyr	Cys	Asp	Ala	Ile	Asp	Leu	Asn	Leu
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	50				55					60					
Gln	Asp	Glu	Trp	Asp	Leu	Leu	Gln	Arg	Met	Ile	Leu	Leu	Ala	His	Glu
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			85					90						95	
Asp	Lys	Thr	Val	Arg	Tyr	Ala	Gln	Met	Leu	Glu	Lys	Ala	Gly	Cys	Gln
			100				105						110		
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Glu Leu Ala Glu Glu Tyr Leu Asp Ile Val Arg Glu His Pro Cys Pro
      195      200      205
Leu Ser Tyr Val Arg Ala His Leu Phe Lys Leu Trp His His Thr Leu
      210      215      220
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225      230      235      240
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Glu Ile Ser Arg Gln Glu Gly Ala Lys Pro Thr Gly Asp Leu Pro Phe
      260      265      270
His Trp Ile Cys Gln Pro Tyr Ile Arg Pro Gly Pro Arg Glu Gly Ser
      275      280      285
Lys Glu Lys Ala Gly Ala Arg Ser Lys Arg Ala Leu Glu Glu Glu Glu
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Cys Arg Gly Cys Cys Lys Lys Arg Ala Ser Lys Glu Thr Ala Asp Cys
      355      360      365
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<210> 5757

<211> 2362

<212> DNA

<213> Homo sapiens

<400> 5757

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<211> 440

<212> PRT

<213> Homo sapiens

<400> 5758

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			100					105					110		
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Asn	Val	Leu	Val	Gln	Asn	Ser	Leu	Arg	Phe	Ala	Ala	Ala	Leu	Ala	Gln
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			165					170						175	
Ile	Lys	Val	Pro	Phe	Asp	Val	Glu	Gln	Asn	Phe	His	Pro	Glu	Phe	Asp
		180						185					190		
Gly	Tyr	Glu	Pro	Gly	Glu	Val	Val	Lys	Gln	Ala	Asp	Val	Val	Leu	Leu
		195				200						205			
Gly	Tyr	Pro	Val	Pro	Phe	Ser	Leu	Ser	Pro	Asp	Val	Arg	Arg	Lys	Asn
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<211> 1333
<212> DNA
<213> Homo sapiens
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<211> 273

<212> PRT

<213> Homo sapiens

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Asp	Ser	Val	Glu	Ser	Ala	Val	Asn	Ala	Glu	Arg	Gly	Gly	Ala	Asp	Arg
	35					40					45				
Ile	Glu	Leu	Cys	Ser	Gly	Leu	Ser	Glu	Gly	Gly	Thr	Thr	Pro	Ser	Met
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Gly	Val	Leu	Gln	Val	Val	Lys	Gln	Ser	Val	Gln	Ile	Pro	Val	Phe	Val
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Met	Ile	Arg	Pro	Arg	Gly	Gly	Asp	Phe	Leu	Tyr	Ser	Asp	Arg	Glu	Ile
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Glu	Val	Met	Lys	Ala	Asp	Ile	Arg	Leu	Ala	Lys	Leu	Tyr	Gly	Ala	Asp
		100						105					110		
Gly	Leu	Val	Phe	Gly	Ala	Leu	Thr	Glu	Asp	Gly	His	Ile	Asp	Lys	Glu
	115					120					125				
Leu	Cys	Met	Ser	Leu	Met	Ala	Ile	Cys	Arg	Pro	Leu	Pro	Val	Thr	Phe
	130					135					140				
His	Arg	Ala	Phe	Asp	Met	Val	His	Asp	Pro	Met	Ala	Ala	Leu	Glu	Thr
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Leu	Leu	Thr	Leu	Gly	Phe	Glu	Arg	Val	Leu	Thr	Ser	Gly	Cys	Asp	Ser
			165					170					175		
Ser	Ala	Leu	Glu	Gly	Leu	Pro	Leu	Ile	Lys	Arg	Leu	Ile	Glu	Gln	Ala

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<211> 333

<212> PRT

<213> Homo sapiens

<400> 5762

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			20					25					30		
Glu	Asn	Ala	Gln	Pro	Thr	Glu	Gly	Glu	Arg	Glu	Ile	Trp	Asn	Gln	Ile
		35					40					45			
Ser	Ala	Val	Leu	Gln	Asp	Ser	Glu	Ser	Ile	Leu	Ala	Asp	Leu	Gln	Ala
	50					55					60				
Tyr	Lys	Gly	Ala	Gly	Pro	Glu	Ile	Arg	Asp	Ala	Ile	Gln	Asn	Pro	Asn
65					70				75					80	
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Leu	Gln	Ser	Leu	Leu	Glu	Ser	Leu	Thr	Cys	Pro	Pro	Tyr	Thr	Pro	Thr
		115					120					125			
Gln	His	Leu	Glu	Arg	Glu	Gln	Ala	Leu	Ala	Lys	Glu	Phe	Ala	Glu	Ile
		130				135					140				
Leu	His	Phe	Thr	Leu	Arg	Phe	Asp	Glu	Leu	Lys	Met	Arg	Asn	Pro	Ala
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Ile	Gln	Asn	Asp	Phe	Ser	Tyr	Tyr	Arg	Arg	Thr	Ile	Ser	Arg	Asn	Arg
			165						170					175	
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		180						185					190		
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Thr	Leu	Ser	Asn	Ala	Thr	Met	His	Phe	Val	Ser	Glu	Asn	Lys	Thr	Leu
	210					215					220				
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Lys	Val	Met	Leu	Glu	Thr	Pro	Glu	Tyr	Arg	Ser	Arg	Phe	Thr	Ser	Glu

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<211> 873

<212> PRT

<213> Homo sapiens

<400> 5766

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<211> 1910

<212> DNA

<213> Homo sapiens

<400> 5767

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<210> 5768

<211> 360

<212> PRT

<213> Homo sapiens

<400> 5768

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		20						25					30		
Thr	Cys	Glu	Asn	Trp	Arg	Glu	Ile	His	His	Leu	Val	Phe	His	Val	Ala
		35					40					45			
Asn	Ile	Cys	Phe	Ala	Val	Gly	Leu	Val	Ile	Pro	Thr	Thr	Leu	His	Leu
		50				55					60				
His	Met	Ile	Phe	Leu	Arg	Gly	Met	Leu	Thr	Leu	Gly	Cys	Thr	Leu	Tyr
65				70					75					80	
Ile	Val	Trp	Ala	Thr	Leu	Tyr	Arg	Cys	Ala	Leu	Asp	Ile	Met	Ile	Trp
			85					90					95		
Asn	Ser	Val	Phe	Leu	Gly	Val	Asn	Ile	Leu	His	Leu	Ser	Tyr	Leu	Leu
		100					105						110		
Tyr	Lys	Lys	Arg	Pro	Val	Lys	Ile	Glu	Lys	Glu	Leu	Ser	Gly	Met	Tyr
		115				120					125				
Arg	Arg	Leu	Phe	Glu	Pro	Leu	Arg	Val	Pro	Pro	Asp	Leu	Phe	Arg	Arg

130		135		140
Leu Thr Gly Gln Phe Cys Met Ile Gln Thr	Leu Lys Lys Gly Gln Thr			
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Tyr Ala Ala Glu Asp Lys Thr Ser Val Asp Asp Arg Leu Ser Ile Leu				
	165	170	175	
Leu Lys Gly Lys Met Lys Val Ser Tyr Arg Gly His Phe Leu His Asn				
	180	185	190	
Ile Tyr Pro Cys Ala Phe Ile Asp Ser Pro Glu Phe Arg Ser Thr Gln				
	195	200	205	
Met His Lys Gly Glu Lys Phe Gln Val Thr Ile Ile Ala Asp Asp Asn				
	210	215	220	
Cys Arg Phe Leu Cys Trp Ser Arg Glu Arg Leu Thr Tyr Phe Leu Glu				
225	230	235	240	
Ser Glu Pro Phe Leu Tyr Glu Ile Phe Arg Tyr Leu Ile Gly Lys Asp				
	245	250	255	
Ile Thr Asn Lys Leu Tyr Ser Leu Asn Asp Pro Thr Leu Asn Asp Lys				
	260	265	270	
Lys Ala Lys Lys Leu Glu His Gln Leu Ser Leu Cys Thr Gln Ile Ser				
	275	280	285	
Met Leu Glu Met Arg Asn Ser Ile Ala Ser Ser Ser Asp Ser Asp Asp				
	290	295	300	
Gly Leu His Gln Phe Leu Arg Ser Thr Ser Ser Met Ser Ser Leu His				
305	310	315	320	
Val Ser Ser Pro His Gln Arg Ala Ser Ala Lys Met Lys Pro Ile Glu				
	325	330	335	
Glu Gly Ala Glu Asp Asp Asp Asp Val Phe Glu Pro Ala Ser Pro Asn				
	340	345	350	
Thr Leu Lys Val His Gln Leu Pro				
	355	360		

<210> 5769

<211> 427

<212> DNA

<213> Homo sapiens

<400> 5769

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120

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180

gtaaaggaga gcaaatgtag ttcttcaatg aatagcatca agatcttctg gggcccagag

240

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300

cagtacagag ttgtacaaga ggaaaaccag gtaagttcta cgtgtgttta cctttattgg

360

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427

<210> 5770

<211> 85
 <212> PRT
 <213> Homo sapiens

<400> 5770
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 35 40 45
 Lys Asp Glu Ala Ser Lys Ile Pro Ile Trp Lys Glu Gln Tyr Arg Val
 50 55 60
 Val Gln Glu Glu Asn Gln Val Ser Ser Thr Cys Val Tyr Leu Tyr Trp
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 Leu Asn Ser Cys Ile
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<210> 5771
 <211> 2539
 <212> DNA
 <213> Homo sapiens

<400> 5771
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 180
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 240
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 300
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 360
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 420
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 480
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 720
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 780
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2520

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2539

<210> 5772
<211> 642
<212> PRT
<213> Homo sapiens

<400> 5772
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Val Arg Cys Ala Thr Pro Pro Gln Leu Ala Asn Gly Val Thr Glu Gly
35 40 45
Leu Asp Tyr Gly Phe Met Lys Glu Val Thr Phe His Cys His Gly Leu
50 55 60
His Leu Ala Arg Cys Ser Lys Thr His Leu Ser Val Arg Gly Asn Trp
65 70 75 80
Asp Ala Glu Ile Pro Leu Cys Lys Pro Val Asn Cys Gly Pro Pro Glu
85 90 95
Asp Leu Ala His Gly Phe Pro Asn Gly Phe Ser Phe Ile His Gly Gly
100 105 110
His Ile Gln Tyr Gln Cys Phe Pro Gly Tyr Lys Leu His Gly Asn Ser
115 120 125
Ser Arg Arg Cys Leu Ser Asn Gly Ser Trp Ser Gly Ser Ser Pro Ser
130 135 140
Cys Leu Pro Cys Arg Cys Ser Thr Pro Val Ile Glu Tyr Gly Thr Val
145 150 155 160
Asn Gly Thr Asp Phe Asp Cys Gly Lys Ala Ala Arg Ile Gln Cys Phe
165 170 175
Lys Gly Phe Lys Leu Leu Gly Leu Ser Glu Ile Thr Cys Glu Ala Asp
180 185 190
Gly Gln Trp Ser Ser Gly Phe Pro His Cys Glu His Thr Ser Cys Gly
195 200 205
Ser Leu Pro Met Ile Pro Asn Ala Phe Ile Ser Glu Thr Ser Ser Trp
210 215 220
Lys Glu Asn Val Ile Thr Tyr Ser Cys Arg Ser Gly Tyr Val Ile Gln
225 230 235 240
Gly Ser Ser Asp Leu Ile Cys Thr Glu Lys Gly Val Trp Asn Gln Pro
245 250 255
Tyr Pro Val Cys Glu Pro Leu Ser Cys Gly Ser Pro Pro Ser Val Ala
260 265 270
Asn Ala Val Ala Thr Gly Glu Ala His Thr Tyr Glu Ser Glu Val Lys
275 280 285
Leu Arg Cys Leu Glu Gly Tyr Thr Met Asp Thr Asp Thr Asp Thr Ile
290 295 300
Thr Cys Gln Lys Asp Gly Arg Trp Phe Pro Glu Arg Ile Ser Cys Ser
305 310 315 320
Pro Lys Lys Cys Pro Leu Pro Glu Asn Ile Thr His Ile Leu Val His
325 330 335
Gly Asp Asp Phe Ser Val Asn Arg Gln Val Ser Val Ser Cys Ala Glu
340 345 350
Gly Tyr Thr Phe Glu Gly Val Asn Ile Ser Val Cys Gln Leu Asp Gly

355	360	365
Thr Trp Glu Pro Pro Phe Ser Asp Glu Ser Cys Ser Pro Val Ser Cys		
370	375	380
Gly Lys Pro Glu Ser Pro Glu His Gly Phe Val Val Gly Ser Lys Tyr		
385	390	395
Thr Phe Glu Ser Thr Ile Ile Tyr Gln Cys Glu Pro Gly Tyr Glu Leu		
405	410	415
Glu Gly Asn Arg Glu Arg Val Cys Gln Glu Asn Arg Gln Trp Ser Gly		
420	425	430
Gly Val Ala Ile Cys Lys Glu Thr Arg Cys Glu Thr Pro Leu Glu Phe		
435	440	445
Leu Asn Gly Lys Ala Asp Ile Glu Asn Arg Thr Thr Gly Pro Asn Val		
450	455	460
Val Tyr Ser Cys Asn Arg Gly Tyr Ser Leu Glu Gly Pro Ser Glu Ala		
465	470	475
His Cys Thr Glu Asn Gly Thr Trp Ser His Pro Val Pro Leu Cys Lys		
485	490	495
Pro Asn Pro Cys Pro Val Pro Phe Val Ile Pro Glu Asn Ala Leu Leu		
500	505	510
Ser Glu Lys Glu Phe Tyr Val Asp Gln Asn Val Ser Ile Lys Cys Arg		
515	520	525
Glu Gly Phe Leu Leu Gln Gly His Gly Ile Ile Thr Cys Asn Pro Asp		
530	535	540
Glu Thr Trp Thr Gln Thr Ser Ala Lys Cys Glu Lys Ile Ser Cys Gly		
545	550	555
Pro Pro Ala His Val Glu Asn Ala Ile Ala Arg Gly Val His Tyr Gln		
565	570	575
Tyr Gly Asp Met Ile Thr Tyr Ser Cys Tyr Ser Gly Tyr Met Leu Glu		
580	585	590
Gly Phe Leu Arg Ser Val Cys Leu Glu Asn Gly Thr Trp Thr Ser Pro		
595	600	605
Pro Ile Cys Arg Ala Val Cys Arg Phe Pro Cys Gln Asn Gly Gly His		
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Leu Pro Thr Pro Lys Cys Leu Phe Leu Ser Arg Gly Leu Asp Gly Ala		
625	630	635
Pro Leu		640

<210> 5773

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5773

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120
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180
gaaagtaaac ggaaccggcg gcgggagtcg cggtcccgtt cgcgtccac caacacggcc
240
gtgtcccggc gcgagcggga ccgggagcgc cctcgtcccc gcccgaccgc atcgacatct
300

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tcgggcgcac ggtgagcaag cgcagcagcc tggacgagaa gcagaagcga gaggaggagg
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 420
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 480
 gaactggaga aaaggaagga tgaaattgaa cgagaagttc tccgaagggt ggaggaagcc
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<210> 5774

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5774

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			20					25				30			
Ser	Ser	Lys	His	Asn	Lys	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg
		35				40					45				
Asp	Lys	Glu	Arg	Val	Arg	Lys	Arg	Ser	Lys	Ser	Arg	Glu	Ser	Lys	Arg
50						55				60					
Asn	Arg	Arg	Arg	Glu	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Thr	Asn	Thr	Ala
65				70				75						80	
Val	Ser	Arg	Arg	Glu	Arg	Asp	Arg	Glu	Arg	Pro	Arg	Pro	Arg	Pro	Thr
			85					90						95	
Ala	Ser	Thr	Ser	Ser	Gly	Ala	Arg								
			100												

<210> 5775

<211> 1441

<212> DNA

<213> Homo sapiens

<400> 5775

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 120
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 180
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 480

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<210> 5776

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5776

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Leu	Gln	Asp	Val	Glu	Glu	Val	Glu	Ile	Gly	Arg	Asp	Thr	Phe	Trp	Pro
		20						25					30		
Asp	Ser	Glu	Pro	Lys	Pro	Glu	Gln	Ala	Pro	Arg	Ser	Pro	Gly	Ser	Gln
		35					40					45			
Ala	Pro	Asp	Glu	Gly	Ala	Gly	Gly	Ala	Leu	Arg	Thr	Ser	Val	Arg	Ser
	50				55						60				
Leu	Pro	Arg	Arg	Ala	Arg	Cys	Ser	Ala	Gly	Phe	Gly	Pro	Glu	Ser	Ser
65			70						75					80	
Ala	Glu	Arg	Pro	Ala	Gly	Gln	Pro	Pro	Gly	Ala	Val	Pro	Cys	Ala	Gln
			85					90						95	
Pro	Arg	Gly	Ala	Trp	Arg	Val	Thr	Leu	Val	Gln	Gln	Ala	Ala	Ala	Gly

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      130      135      140
Ala Cys Gly Lys Ser Phe Lys Tyr Asn Ser Leu Leu Lys His Gln
145      150      155      160
Arg Ile His Thr Gly Glu Lys Pro Tyr Ala Cys His Glu Cys Gly Lys
      165      170      175
Cys Phe Ala Ala Ala Ser Arg Phe Ile Gln His Gln Arg Ile His Ser
      180      185      190
Gly Glu Lys Pro Tyr Ala Cys Pro Glu Cys Ser Lys Thr Phe Thr Arg
      195      200      205
Ser Ser Asn Leu Ile Lys His Gln Val Ile His Ser Gly Glu Arg Pro
      210      215      220
Phe Ala Cys Gly Asp Cys Gly Lys Leu Phe Arg Arg Ser Phe Ala Leu
225      230      235      240
Leu Glu His Ala Arg Val His Ser Gly Glu Lys Pro Tyr Glu Cys Ser
      245      250      255
Asp Cys Gly Lys Cys Phe Arg Gly Arg Ser His Phe Phe Arg His Asn
      260      265      270
Arg Thr His Thr Gly Glu Lys Pro Tyr His Cys Leu Asp Cys Gly Lys
      275      280      285
Ser Phe Ser His Ser Ser His Leu Ile Lys His Gln Arg Thr His Arg
      290      295      300
Gly Val Arg Pro Tyr Ala Cys Pro Leu Cys Gly Lys Ser Phe Ser Arg
305      310      315      320
Arg Ser Asn Leu His Arg His Glu Lys Ile His Thr Thr Gly Pro Lys
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<210> 5777

<211> 1431

<212> DNA

<213> Homo sapiens

<400> 5777

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420

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<210> 5778

<211> 164

<212> PRT

<213> Homo sapiens

<400> 5778

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Gln	Ala	Lys	Met	Arg	Pro	Leu	Gln	Pro	Leu	Pro	Gln	Pro	Ser	Glu	Arg
			20					25					30		
Ala	Gly	Ala	Ala	Leu	Gly	Phe	Leu	Leu	Arg	Arg	Cys	Leu	Gln	Gly	Pro
			35				40					45			
Val	Gly	Asp	His	Gly	Gln	His	Lys	Ser	Met	Ala	Glu	Gly	Ile	Leu	Ala
	50				55						60				
Glu	Val	Leu	Arg	Arg	His	Leu	Gln	His	Glu	Glu	Ala	Pro	Gly	Leu	Arg
65					70					75				80	
Arg	Gly	Arg	Phe	Ala	Glu	Arg	Arg	Gly	Pro	Lys	Trp	Ile	Trp	Arg	Ser
			85					90						95	
Arg	Pro	Ala	Gly	Thr	Pro	Ala	Leu	Thr	Val	Ala	Leu	Arg	Leu	Pro	Pro

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      100      105      110
Gln Arg Arg Ala Gly Pro Pro Thr Tyr Val Pro Gly Cys Leu Arg Gln
      115      120      125
Ala Ala Arg Ser Pro Lys Leu Val Arg Ala Thr Trp Val Thr Ala Ala
      130      135      140
Val Pro Gly Arg Lys Arg Ser Leu Ala Pro Glu Gln Pro Ile Leu Gly
      145      150      155      160
Pro Ser Gln Val

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<210> 5779

<211> 371

<212> DNA

<213> Homo sapiens

<400> 5779

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120
gcacacggga atgtgtgcgg gtgtgtgtgc gtgcatgcag ctgtgtgtgg atgtgcantc
180
gtgtgtgggt gtgtagggtgt gtgtgggtgt gtgcaccagt gcagggtgtgc atgggtgtgt
240
acagggtgggt gtgtgtatgt gtgtgggggt gtgcccattct gtgcagggtgt gtgggtgtgc
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gtgtgcagtg t
371

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<210> 5780

<211> 123

<212> PRT

<213> Homo sapiens

<400> 5780

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Leu Leu Arg Arg Val Glu Gly Arg Lys Gly Arg Thr His Asp Leu Pro
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Gln Arg His Gly Arg Glu Arg Gly Val Ile Ser Ala Leu Ser Gly Ile
20      25      30
Pro Cys Val Cys Xaa Arg Val Cys Ala His Gly Asn Val Cys Gly Cys
35      40      45
Val Cys Val His Ala Ala Val Cys Gly Cys Ala Xaa Val Cys Gly Cys
50      55      60
Val Gly Val Cys Gly Cys Val His Gln Cys Arg Cys Ala Trp Val Cys
65      70      75      80
Thr Gly Gly Cys Val Tyr Val Cys Gly Gly Val Pro Ile Cys Ala Gly
85      90      95
Val Trp Val Cys Arg Val Xaa Cys Leu Cys Val Gly Val Xaa Pro Cys
100      105      110
Val Pro Leu Trp Arg Cys Val Gly Val Cys Ser
115      120

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<210> 5781
 <211> 845
 <212> DNA
 <213> Homo sapiens

<400> 5781
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 120
 ccaccaggtg aggatggcac tgcaacatct tccactgagg ctccagctgc cctctcaggt
 180
 acatcagggc ctggancgtc ctctctcca ggagggccag gactcggccc cctgccagcc
 240
 cccgaagcat tgcagccagg agtgcagcgt gggggccctg caggccatgg ccaggcccca
 300
 gcgccaccag caccaggtca ggctggaagc cataggccag gggcagcacc aagcccaaga
 360
 tgcagctcag gaaaccaccg gtcatcactg gcagtggcgt ggagacatgg aacatggata
 420
 gggcagccgc ctcttgccc ctgatgttca gccacagact cctcccgtca tgggcgaggt
 480
 ctggaggccg gtccagctgt cccagggccca cgcacagcag cctggaagaa gagctggcct
 540
 caggacaggt gttcatgttg tccagagtcc attcccagaa ctctctgtgc ttggccagcc
 600
 aggatagggg tgcccacagg tcctgccgtc agaggctcag gatggccaag tgaggcttac
 660
 ctctgggctc cgtgggacag gcctctccga acagccacat ccagggtggc tgctgcagca
 720
 gaggtggag tggctgctat accactgttc acctgtggga tgaataaaca gtggagaatg
 780
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 840
 ctctg
 845

<210> 5782
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 5782
 Gly Val Pro Cys Pro Lys Ile Glu Gly Ala Val Gly Leu Gly Ser Gly
 1 5 10 15
 Ser Arg Pro Arg Gly Ala Gly Val Arg Cys His Phe Cys Gly Val Asn
 20 25 30
 Ala Pro Thr Leu Ala Asp Phe Lys Pro Pro Gly Glu Asp Gly Thr Ala
 35 40 45
 Thr Ser Ser Thr Glu Ala Pro Ala Ala Leu Ser Gly Thr Ser Gly Pro
 50 55 60
 Gly Xaa Ser Ser Pro Pro Gly Gly Pro Gly Leu Gly Pro Leu Pro Ala
 65 70 75 80
 Pro Glu Ala Leu Gln Pro Gly Val Gln Arg Gly Gly Pro Ala Gly His

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      85              90              95
Gly Gln Ala Pro Ala Pro Pro Ala Pro Gly Gln Ala Gly Ser His Arg
      100              105              110
Pro Gly Ala Ala Pro Ser Pro Arg Cys Ser Ser Gly Asn His Arg Ser
      115              120              125
Ser Leu Ala Val Ala Trp Arg His Gly Thr Trp Ile Gly Gln Pro Pro
      130              135              140
Pro Cys Pro
145

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<210> 5783

<211> 1839

<212> DNA

<213> Homo sapiens

<400> 5783

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120
gctgggactc tccttcttag tacacaccga ctgatttggg gagatcagaa aaatcatgag
180
tggtgcatgg ccattctcct ttcccaaatt gtgttcattg aagaacaggc ggctggaatt
240
gggaagagtg ccaaaatagt ggttcattct caccagctc ctctaaca aagaacctggc
300
ccattccaga gtagtaagaa ctctacatc aaactctcct tcaaagaaca tggccagatt
360
gagttttaca ggcgtttatc agaggaaatg acacaaagaa gatgggagaa tatgccagtt
420
tcccagtcac tacaacaaa tagaggacc cagccaggaa gaataagggc tgtaggaatt
480
gtaggtattg aaaggaaact ggaagaaaaa agaaaagaaa ctgacaaaaa ctttctgag
540
gcctttgaag acctcagcaa actaatgatc aaggctaagg aaatggtgga attatcaaaa
600
tcaattgcta ataaaattaa agacaaacaa ggtgacatca cagaagatga gaccatcagg
660
tttaaactct acttgctgag catgggaata gctaaccag ttaccagaga aacctacggc
720
tcaggcacac agtaccacat gcagctggcc aaacaactgg ctggaatatt gcagggtgcct
780
ttagaggaac gagggggaat aatgtcactc acggaggtgt actgcttagt aaaccgagct
840
cgaggaatgg aattgctctc accagaagat ttagtgaatg cgtgcaagat gctggaagca
900
ctgaaattac ctctcaggct cctgtgtgtt gacagtggcg tcatggtaat tgagcttcag
960
tctcacaagg aagaggaaat ggtggcctcg gccctggaga cagtttcaga aaagggatcc
1020
ctaaccatcag aagagtttgc taagcttggt ggaatgtctg tcctcctagc caaagaaagg
1080
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1140

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 ccatatgctt gcgtcatgta gaggttgat gacattgagc taagagataa accccgatca
 1260
 attgagaatt tattggaact tcacagtgca atgtaaatct cttttaattt ctecccaaat
 1320
 atggtccagg aaatttattt agtatacgca taggaaaatt cagaaaagtg aatgccaata
 1380
 tgaatttaaa atcatgctat agtgcagaac cctcagagtt taacttggaa tatagtggat
 1440
 tttaacttga tcctcaaadc taatcatttt ataaagaagg gaatttagtt ttgcagagaa
 1500
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 1560
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 1620
 cccagggct tttagaagca gtcatagaca tgtcttcaac ataccataa aaataccttt
 1680
 aaaaatgaaa taattttatt tgacacatta tttatatata ttctatctag gtttctcttt
 1740
 gtttttttta aagtgatgat ttcattgact gggcatttaa aagaaatggc aactgtggtc
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 1839

<210> 5784

<211> 386

<212> PRT

<213> Homo sapiens

<400> 5784

Met	Asp	Arg	Phe	Val	Trp	Thr	Ser	Gly	Leu	Leu	Glu	Ile	Asn	Glu	Thr
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Leu	Val	Ile	Gln	Gln	Arg	Gly	Val	Arg	Ile	Tyr	Asp	Gly	Glu	Glu	Lys
			20					25					30		
Ile	Lys	Phe	Asp	Ala	Gly	Thr	Leu	Leu	Leu	Ser	Thr	His	Arg	Leu	Ile
		35				40						45			
Trp	Arg	Asp	Gln	Lys	Asn	His	Glu	Cys	Cys	Met	Ala	Ile	Leu	Leu	Ser
	50				55						60				
Gln	Ile	Val	Phe	Ile	Glu	Gln	Ala	Ala	Gly	Ile	Gly	Lys	Ser	Ala	
65				70					75					80	
Lys	Ile	Val	Val	His	Leu	His	Pro	Ala	Pro	Pro	Asn	Lys	Glu	Pro	Gly
			85					90					95		
Pro	Phe	Gln	Ser	Ser	Lys	Asn	Ser	Tyr	Ile	Lys	Leu	Ser	Phe	Lys	Glu
			100					105					110		
His	Gly	Gln	Ile	Glu	Phe	Tyr	Arg	Arg	Leu	Ser	Glu	Glu	Met	Thr	Gln
		115				120					125				
Arg	Arg	Trp	Glu	Asn	Met	Pro	Val	Ser	Gln	Ser	Leu	Gln	Thr	Asn	Arg
	130				135						140				
Gly	Pro	Gln	Pro	Gly	Arg	Ile	Arg	Ala	Val	Gly	Ile	Val	Gly	Ile	Glu
145				150					155					160	
Arg	Lys	Leu	Glu	Glu	Lys	Arg	Lys	Glu	Thr	Asp	Lys	Asn	Ile	Ser	Glu
			165					170					175		
Ala	Phe	Glu	Asp	Leu	Ser	Lys	Leu	Met	Ile	Lys	Ala	Lys	Glu	Met	Val

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<210> 5785
<211> 785
<212> DNA
<213> Homo sapiens
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<400> 5785
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120
ccttggccat ggcagcttgg ttgggacagc cgggccaaagg gaaaaaaagg tgcaaaagtc
180
caaatgctgg cacttcaggt gtggccggca cccagccagg cgcagtgggt gggcagggcg
240
ccatgcttct ctctggcgga caggtcggcc gtgtagcagc gccccctccc agcagccact
300
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360
gcacaaagtt ctgcagccgg ggattggggg tcctctccac gtactgcaca ggccttggcc
420
cgccctcacc ggctggggcca ccatccagct gctgttgcac ctgctgccag gcttcggaca
480
caaagcggac attctccttg tggggcagtg tgtaggtctc ctgggtcccc tggagggatg
540
gggacttggg ggggtcccgc cggcgattca cacgattgaa cacaagcctt ggccctgcac
600

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tcgacagggg ccaggggtccc agcgggtgcg cgagagctgc gcccgctggg gctgcaaggt
 660
 cggcgggcgcg ggctgccggc ttttcaggag ctcttgagagc tggcccttca cctgctgctg
 720
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 780
 cgcgc
 785

<210> 5786

<211> 159

<212> PRT

<213> Homo sapiens

<400> 5786

Met Tyr Thr Ile Ile Asn Gly Pro Ser Lys Leu Val Ala Gln Pro His
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 Arg Ser His Ala Ala Ala Gly Glu Gly Pro Ala Pro Gly Ala Pro Glu
 20 25 30
 Lys Pro Ala Ala Arg Ala Ala Asp Leu Ala Ala Pro Ala Gly Ala Ala
 35 40 45
 Leu Ala Gln Pro Leu Gly Pro Trp Pro Leu Ser Ser Ala Gly Pro Arg
 50 55 60
 Leu Val Phe Asn Arg Val Asn Arg Arg Arg Asp Pro Ser Lys Ser Pro
 65 70 75 80
 Ser Leu Gln Gly Thr Gln Glu Thr Tyr Thr Leu Ala His Lys Glu Asn
 85 90 95
 Val Arg Phe Val Ser Glu Ala Trp Gln Gln Val Gln Gln Gln Leu Asp
 100 105 110
 Gly Gly Pro Ala Gly Glu Gly Gly Pro Arg Pro Val Gln Tyr Val Glu
 115 120 125
 Arg Thr Pro Asn Pro Arg Leu Gln Asn Phe Val Pro Ile Asp Leu Asp
 130 135 140
 Glu Trp Trp Ala Gln Gln Phe Leu Ala Arg Ile Thr Ser Cys Ser
 145 150 155

<210> 5787

<211> 1683

<212> DNA

<213> Homo sapiens

<400> 5787

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 120
 ccngggcgag gaggattctg ggagttggag gccgaggctg cgaccngcag gcgcaaacct
 180
 gcccctgggg tgagggctgt aagtggcgcg attcgggca gcgccccgat ggaacctcct
 240
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 300
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 360

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 420
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 480
 ctccgctacc aggagactcc tgggtccccg gaggccttga gccaaactacg agtactctgc
 540
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 660
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 720
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 780
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 840
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 900
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 960
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 1020
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 1080
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 1200
 cattctggag agaaacccta taagtgtagt gactgtggga aaactttcaa acagagctca
 1260
 aacctcggtc agcatcagag aattcataca ggagagaaac ctttcgaatg taatgaatgt
 1320
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 1683

<210> 5788

<211> 417

<212> PRT

<213> Homo sapiens

<400> 5788

Met Ala Val Ser Leu Thr Ala Ala Glu Thr Leu Ala Leu Gln Gly Thr

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	20	25	30
Ser Cys Glu Tyr Glu Thr Arg Leu Pro Gly Asn His Ser Thr Ser Gln			
	35	40	45
Glu Ile Phe Arg Gln Arg Phe Arg His Leu Arg Tyr Gln Glu Thr Pro			
	50	55	60
Gly Pro Arg Glu Ala Leu Ser Gln Leu Arg Val Leu Cys Cys Glu Trp			
65	70	75	80
Leu Arg Pro Glu Lys His Thr Lys Glu Gln Ile Leu Glu Phe Leu Val			
	85	90	95
Leu Glu Gln Phe Leu Thr Ile Leu Pro Glu Glu Leu Gln Ser Trp Val			
	100	105	110
Arg Gly His His Pro Lys Ser Gly Glu Glu Ala Val Thr Val Leu Glu			
	115	120	125
Asp Leu Glu Lys Gly Leu Glu Pro Glu Pro Gln Val Pro Gly Pro Ala			
	130	135	140
His Gly Pro Ala Gln Glu Glu Pro Trp Glu Lys Lys Glu Ser Leu Gly			
145	150	155	160
Ala Ala Gln Glu Ala Leu Ser Ile Gln Leu Gln Pro Lys Glu Thr Gln			
	165	170	175
Pro Phe Pro Lys Ser Glu Gln Val Tyr Leu His Phe Leu Ser Val Val			
	180	185	190
Thr Glu Asp Gly Pro Glu Pro Lys Asp Lys Gly Ser Leu Pro Gln Pro			
	195	200	205
Pro Ile Thr Glu Val Glu Ser Gln Val Phe Ser Glu Lys Leu Ala Thr			
	210	215	220
Asp Thr Ser Thr Phe Glu Ala Thr Ser Glu Gly Thr Leu Glu Leu Gln			
225	230	235	240
Gln Arg Asn Pro Lys Ala Glu Arg Leu Arg Trp Ser Pro Ala Gln Glu			
	245	250	255
Glu Ser Phe Arg Gln Met Val Val Ile His Lys Glu Ile Pro Thr Gly			
	260	265	270
Lys Lys Asp His Glu Cys Ser Glu Cys Gly Lys Thr Phe Ile Tyr Asn			
	275	280	285
Ser His Leu Val Val His Gln Arg Val His Ser Gly Glu Lys Pro Tyr			
	290	295	300
Lys Cys Ser Asp Cys Gly Lys Thr Phe Lys Gln Ser Ser Asn Leu Gly			
305	310	315	320
Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Phe Glu Cys Asn Glu			
	325	330	335
Cys Gly Lys Ala Phe Arg Trp Gly Ala His Leu Val Gln His Gln Arg			
	340	345	350
Ile His Ser Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala			
	355	360	365
Phe Ser Gln Ser Ser Tyr Leu Ser Gln His Arg Arg Ile His Ser Gly			
	370	375	380
Glu Lys Pro Phe Ile Cys Lys Glu Cys Gly Lys Ala Tyr Gly Trp Cys			
385	390	395	400
Ser Glu Leu Ile Arg His Arg Arg Val His Ala Arg Lys Glu Pro Ser			
	405	410	415
His			

<210> 5789
<211> 1201
<212> DNA
<213> Homo sapiens

<400> 5789
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120
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180
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240
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540
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600
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720
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780
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840
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900
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960
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1080
agtggctttg accgctatcg ccaggagtgg atggactatg gctgtgcaca ggaggcagag
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1200
t
1201

<210> 5790
<211> 400
<212> PRT
<213> Homo sapiens

<400> 5790

Xaa Arg Pro Gln Pro Glu Pro Gly Pro Pro Pro Ser Ser Gly Pro Gly
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 20 25 30
 Leu Trp Leu Leu Val Leu Val Leu Arg Glu Ala Ala Arg Ala Leu Ser
 35 40 45
 Pro Gln Pro Gly Ala Gly His Asp Glu Gly Pro Gly Ser Gly Trp Ala
 50 55 60
 Ala Lys Gly Thr Val Arg Gly Trp Asn Arg Arg Ala Arg Glu Ser Pro
 65 70 75 80
 Gly His Val Ser Glu Pro Asp Arg Thr Gln Leu Ser Gln Asp Leu Gly
 85 90 95
 Gly Gly Thr Leu Ala Met Asp Thr Leu Pro Asp Asn Arg Thr Arg Val
 100 105 110
 Val Glu Asp Asn His Ser Tyr Tyr Val Ser Arg Leu Tyr Gly Pro Ser
 115 120 125
 Glu Pro His Ser Arg Glu Leu Trp Val Asp Val Ala Glu Ala Asn Arg
 130 135 140
 Ser Gln Val Lys Ile His Thr Ile Leu Ser Asn Thr His Arg Gln Ala
 145 150 155 160
 Ser Arg Val Val Leu Ser Phe Asp Phe Pro Phe Tyr Gly His Pro Leu
 165 170 175
 Arg Gln Ile Thr Ile Ala Thr Gly Gly Phe Ile Phe Met Gly Asp Val
 180 185 190
 Ile His Arg Met Leu Thr Ala Thr Gln Tyr Val Ala Pro Leu Met Ala
 195 200 205
 Asn Phe Asn Pro Gly Tyr Ser Asp Asn Ser Thr Val Val Tyr Phe Asp
 210 215 220
 Asn Gly Thr Val Phe Val Val Gln Trp Asp His Val Tyr Leu Gln Gly
 225 230 235 240
 Trp Glu Asp Lys Gly Ser Phe Thr Phe Gln Ala Ala Leu His His Asp
 245 250 255
 Gly Arg Ile Val Phe Ala Tyr Lys Glu Ile Pro Met Ser Val Pro Glu
 260 265 270
 Ile Ser Ser Ser Gln His Pro Val Lys Thr Gly Leu Ser Asp Ala Phe
 275 280 285
 Met Ile Leu Asn Pro Ser Pro Asp Val Pro Glu Ser Arg Arg Arg Ser
 290 295 300
 Ile Phe Glu Tyr His Arg Ile Glu Leu Asp Pro Ser Lys Val Thr Ser
 305 310 315 320
 Met Ser Ala Val Glu Phe Thr Pro Leu Pro Thr Cys Leu Gln His Arg
 325 330 335
 Ser Cys Asp Ala Cys Met Ser Ser Asp Leu Thr Phe Asn Cys Ser Trp
 340 345 350
 Cys His Val Leu Gln Arg Cys Ser Ser Gly Phe Asp Arg Tyr Arg Gln
 355 360 365
 Glu Trp Met Asp Tyr Gly Cys Ala Gln Glu Ala Glu Gly Arg Met Cys
 370 375 380
 Glu Asp Phe Gln Asp Glu Asp His Asp Ser Ala Ser Pro Asp Thr Phe
 385 390 395 400

<210> 5791

<211> 3285

<212> DNA

<213> Homo sapiens

<400> 5791

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120
tagcatggtc cattcagctt tcagaatctt tcggaggctc tagtttggtg cctagtacta
180
gttatttttg ttagaacaat ctctcaaat ttagataatt ttccagttgt atgtctgtca
240
cttttaactc taaagcgtaa gaatcatggt aacctctcc tcccccgcc gtccccgcg
300
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<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 5793

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<211> 535

<212> PRT

<213> Homo sapiens

<400> 5800

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<211> 2418

<212> DNA

<213> Homo sapiens

<400> 5801

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<211> 350

<212> PRT

<213> Homo sapiens

<400> 5802

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<211> 692

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

<400> 5804

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<211> 1112

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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Pro	Pro	Glu	Glu	Phe	Leu	Val	Gln	Glu	Asp	Glu	Gln	Asp	Asn	Cys	Glu
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<210> 5807

<211> 1429

<212> DNA

<213> Homo sapiens

<400> 5807

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<210> 5808

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5808

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His	Leu	Arg	His	Pro	Val	Cys	Val	Glu	Leu	Leu	Thr	Val	Leu	Trp	Val
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<210> 5809

<211> 2009

<212> DNA

<213> Homo sapiens

<400> 5809

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<210> 5810

<211> 52

<212> PRT

<213> Homo sapiens

<400> 5810

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Gly	Gly	Gln	Trp	Arg	Asp	Leu	Gly	Ser	Leu	Gln	Pro	Pro	Pro	Gly
			20					25				30		
Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser	Ser	Trp	His	Tyr
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<210> 5811

<211> 1607

<212> DNA

<213> Homo sapiens

<400> 5811

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<210> 5812

<211> 463

<212> PRT

<213> Homo sapiens

<400> 5812

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		20					25					30			
Thr	Pro	Gln	Ala	Ile	Glu	Pro	Gln	Ala	Ile	Val	Gln	Gln	Val	Pro	Ala
		35				40				45					
Pro	Ser	Arg	Met	Gln	Met	Pro	Gln	Gly	Asn	Pro	Leu	Leu	Leu	Ser	His
	50				55				60						
Thr	Leu	Gln	Glu	Leu	Leu	Ala	Arg	Asp	Thr	Val	Gln	Val	Glu	Leu	Ile
65			70					75					80		
Pro	Glu	Lys	Lys	Gly	Leu	Phe	Leu	Lys	His	Val	Glu	Tyr	Glu	Val	Ser
		85					90				95				
Ser	Gln	Arg	Phe	Lys	Ser	Ser	Val	Tyr	Arg	Arg	Tyr	Asn	Asp	Phe	Val
		100					105					110			
Val	Phe	Gln	Glu	Met	Leu	Leu	His	Lys	Phe	Pro	Tyr	Arg	Met	Val	Pro

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145	150	155
Pro Leu Phe Ser Glu Asp Val	Val Leu Lys Leu Phe Leu	Ser Phe Ser
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Gly Ser Asp Val Gln Asn Lys	Leu Lys Glu Ser Ala Gln	Cys Val Gly
180	185	190
Asp Glu Phe Leu Asn Cys Lys	Leu Ala Thr Arg Ala Lys	Asp Phe Leu
195	200	205
Pro Ala Asp Ile Gln Ala Gln	Phe Ala Ile Ser Arg Glu	Leu Ile Arg
210	215	220
Asn Ile Tyr Asn Ser Phe His	Lys Leu Arg Asp Arg Ala	Glu Arg Ile
225	230	235
Ala Ser Arg Ala Ile Asp Asn	Ala Ala Asp Leu Leu Ile	Phe Gly Lys
245	250	255
Glu Leu Ser Ala Ile Gly Ser	Asp Thr Thr Pro Leu Pro	Ser Trp Ala
260	265	270
Ala Leu Asn Ser Ser Thr Trp	Gly Ser Leu Lys Gln Ala	Leu Lys Gly
275	280	285
Leu Ser Val Glu Phe Ala Leu	Leu Ala Asp Lys Ala Ala	Gln Gln Gly
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Lys Gln Glu Glu Asn Asp Val	Val Glu Lys Leu Asn Leu	Phe Leu Asp
305	310	315
Leu Leu Gln Ser Tyr Lys Asp	Leu Cys Glu Arg His Glu	Lys Gly Val
325	330	335
Leu His Lys His Gln Arg Ala	Leu His Lys Tyr Ser Leu	Met Lys Arg
340	345	350
Gln Met Met Ser Ala Thr Ala	Gln Asn Arg Glu Pro Glu	Ser Val Glu
355	360	365
Gln Leu Glu Ser Arg Ile Val	Glu Gln Glu Asn Ala Ile	Gln Thr Met
370	375	380
Glu Leu Arg Asn Tyr Phe Ser	Leu Tyr Cys Leu His Gln	Glu Thr Gln
385	390	395
Leu Ile His Val Tyr Leu Pro	Leu Thr Ser His Ile Leu	Arg Ala Phe
405	410	415
Val Asn Ser Gln Ile Gln Gly	His Lys Glu Met Ser Lys	Val Trp Asn
420	425	430
Asp Leu Arg Pro Lys Leu Ser	Cys Leu Phe Ala Gly Pro	His Ser Thr
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<210> 5813

<211> 2991

<212> DNA

<213> Homo sapiens

<400> 5813

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120

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<210> 5814

<211> 149

<212> PRT

<213> Homo sapiens

<400> 5814

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			20					25				30			
Arg	Leu	Phe	Asn	Leu	Val	His	Gln	Ala	Tyr	Glu	Val	Leu	Ser	Asp	Pro

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Glu Glu Phe Glu Arg Leu Gln Arg Glu Arg Glu Glu Arg Arg Leu Gln
      85              90              95
Gln Arg Thr Asn Pro Lys Leu Cys Asp Asn Lys Leu Cys Ser Ala Val
      100              105              110
Phe Ile Pro Trp Asn Pro Thr Arg Pro Asp His Cys Pro Ser Ser Glu
      115              120              125
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Val Ser His Glu His
145

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<210> 5815

<211> 590

<212> DNA

<213> Homo sapiens

<400> 5815

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<210> 5816

<211> 196

<212> PRT

<213> Homo sapiens

<400> 5816

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<210> 5817

<211> 648

<212> DNA

<213> Homo sapiens

<400> 5817

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<210> 5818

<211> 191

<212> PRT

<213> Homo sapiens

<400> 5818

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Pro Lys Asn Ser Val His Lys Leu Asp Val Ser Arg Ser Pro Pro Leu
          50           55           60
Met Val Lys Lys Asn Pro Ala Phe Asn Lys Gly Ser Gly Ile Val Thr
65           70           75           80
Asn Gly Ser Phe Ser Ser Ser Asn Ala Glu Gly Leu Glu Lys Thr Gln
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Thr Thr Pro Asn Gly Ser Leu Gln Ala Arg Arg Ser Ser Ser Leu Lys
          100          105          110
Val Ser Gly Thr Lys Met Gly Thr His Ser Val Gln Asn Gly Thr Val
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Arg Met Gly Ile Leu Asn Ser Asp Thr Leu Gly Asn Pro Thr Asn Val
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Arg Asn Met Ser Trp Leu Pro Asn Gly Tyr Val Thr Leu Arg Asp Asn
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Lys Gln Lys Glu Gln Ala Gly Glu Leu Gly Gln His Asn Arg Leu Ser
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<211> 1652

<212> DNA

<213> Homo sapiens

<400> 5819

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<210> 5820

<211> 274

<212> PRT

<213> Homo sapiens

<400> 5820

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			20					25					30		
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Leu	Phe	Tyr	Val	Val	Gly	Leu	Arg	Asn	Thr	Leu	Thr	Arg	Ile	Arg	Lys

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His	Ala	Ala	Ala	Phe	Ser	Asp	Asp	Cys	Asp	Leu	Pro	Ser	Ala	Gln	Asp
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<210> 5821

<211> 3292

<212> DNA

<213> Homo sapiens

<400> 5821

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<211> 712

<212> PRT

<213> Homo sapiens

<400> 5822

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His	Lys	Glu	Arg	Cys	Ile	Ala	Ala	Ser	Leu	Glu	Leu	Asn	Asn	Pro	Val
		35				40					45				
Pro	Glu	Gln	Pro	Pro	Leu	Pro	Thr	Ser	Glu	Ser	Pro	Phe	Ala	Trp	Ser
	50				55					60					
Pro	Leu	Ala	Gly	Glu	Lys	Phe	Val	Glu	Val	Tyr	Lys	Glu	Ala	His	Leu
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Leu	Ala	Leu	His	Ile	Glu	Ser	Ser	Ser	Arg	Asn	Gln	Ala	Ala	Gln	Ala
			85					90						95	
Ala	Lys	Pro	Glu	Asp	Pro	Arg	Ser	Gln	Gly	Val	Glu	Arg	Phe	Ile	Gln

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 145 150 155 160
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 165 170 175
 Gly Pro Pro His Ser Ala His Ala Leu Pro Arg Glu Ser Cys Thr Ala
 180 185 190
 His Ala Ala Ser Gln Ala Ala Thr Gln Arg Lys Pro Gly Thr Lys Leu
 195 200 205
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 210 215 220
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 225 230 235 240
 Ile Pro Ala Glu Lys Glu Ser His Arg Asp Val Leu Pro Asp Lys Pro
 245 250 255
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 Gly Lys Arg Ala Ile Pro Val Pro Asn Lys Leu Gly Leu Lys Lys Thr
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 Thr Pro Val Arg Arg Ser Ser Gly Pro Ala Pro Gln Ser Leu Leu Ser
 485 490 495
 Ala Trp Arg Val Ser Ala Leu Pro Thr Pro Ala Ser Arg Arg Cys Ser
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 515 520 525
 Pro Leu Cys Val Pro Ala Arg Arg Arg Ser Ser Glu Pro Arg Lys Asn

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<212> DNA

<213> Homo sapiens

<400> 5823

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<400> 5824
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<213> Homo sapiens

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<211> 1479

<212> PRT

<213> Homo sapiens

<400> 5830

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Gly Trp Pro Gly Thr Asn Thr Thr Ala Ser Leu Gly Met Tyr Glu Cys
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Asp Arg Glu Ala Leu Asn Leu Arg Trp His Cys Arg Thr Leu Gly Asp
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Tyr Gly Ser Glu Glu Asp Leu Cys Ala Leu Pro Tyr His Glu Val Tyr
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Phe Thr Gly Arg Trp Asp Asp Arg Ser Cys Thr Glu Glu Thr His Gly
      1090          1095          1100
Phe Ile Cys Gln Lys Gly Thr Asp Pro Ser Leu Ser Pro Ser Pro Ala
1105          1110          1115          1120
Ala Leu Pro Pro Ala Pro Gly Thr Glu Leu Ser Tyr Leu Asn Gly Thr
      1125          1130          1135
Phe Arg Leu Leu Gln Lys Pro Leu Arg Trp His Asp Ala Leu Leu Leu
      1140          1145          1150
Cys Glu Ser His Asn Ala Ser Leu Ala Tyr Val Pro Asp Pro Tyr Thr
      1155          1160          1165
Gln Ala Phe Leu Thr Gln Ala Ala Arg Gly Leu Arg Thr Pro Leu Trp
      1170          1175          1180
Ile Gly Leu Ala Gly Glu Gly Ser Arg Arg Tyr Ser Trp Val Ser
1185          1190          1195          1200
Glu Glu Pro Leu Asn Tyr Val Gly Trp Gln Asp Gly Glu Pro Gln Gln
      1205          1210          1215
Pro Gly Gly Cys Thr Tyr Val Asp Val Asp Gly Ala Trp Arg Thr Thr

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 Pro Pro Pro Pro Arg Arg Ile Ser Tyr His Gly Ser Cys Pro Gln Gly
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 Leu Ala Asp Ser Ala Trp Ile Pro Phe Arg Glu His Cys Tyr Ser Phe
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 His Met Glu Leu Leu Leu Gly His Lys Glu Ala Arg Gln Arg Cys Gln
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 Arg Ala Gly Gly Ala Val Leu Ser Ile Leu Asp Glu Met Glu Asn Val
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 Phe Val Trp Glu His Leu Gln Ser Tyr Glu Gly Gln Ser Arg Gly Ala
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 Pro Ser Met Leu Ser His Asn Ser Cys Tyr Trp Ile Gln Ser Asn Ser
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<211> 2216

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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Leu	Gly	Ala	Gln	Arg	Pro	Arg	Asn	Ala	Gln	Leu	Asp	Cys	Ser	Lys	Leu
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Glu	Thr	Leu	Gly	Ile	Gly	Gln	Arg	Thr	Pro	Phe	Arg	Ile	Gly	Ile	Lys
	290					295					300				
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 <212> PRT
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 35 40 45
 Asn Asn Gln Glu Ser Phe Ile Ala Phe Ala Arg Val Phe Ser Gly Val
 50 55 60
 Ala Arg Arg Gly Lys Lys Ile Phe Val Leu Gly Pro Lys Tyr Ser Pro
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 Leu Glu Phe Leu Arg Arg Val Pro Leu Gly Phe Ser Ala Pro Pro Asp